

# THE CANCER CARE PROGRAM 2011 ANNUAL REPORT

*Nationally Recognized, Community-Focused Care*



Stony Brook Cancer Center

## Contents

Cancer Care at Stony Brook Cancer Center	3
A Team Approach to Care	5
Essential to the Team	22
Clinical Support	26
Patient Support and Advocacy	28
Community Outreach and Education	30
Basic and Clinical Research	32
Quality and Standards	37



Roberto Bergamaschi, MD, PhD, Chief, Division of Colon and Rectal Surgery (right), with Joan and Ernest Galfus, guests at the Celebration Breakfast honoring clinical trial participants, held as part of National Cancer Survivors Day®



Recipients of the Daniel Brooks Memorial Educational Award for Students with Cancer, Ivette Rivera (far left) and Anthony Raccasi (far right); with Robert Parker, MD, Director, Pediatric Hematology/Oncology; Nicole Gutman, Coordinator, School Re-Entry Program (center); and Debra Giugliano, RN, CPNP, CPON, Director, School Re-Entry Program, at the annual ceremony

### Pictured on cover (left to right):

Kevin Watkins, MD, Chief, Upper Gastrointestinal and General Surgery Group (left) and Jonathan Buscaglia, MD, Director, Advanced Endoscopy Center, conducting an educational presentation for the community on upper gastrointestinal cancers

Darla Broberg, PhD, Program Director, Pediatric Oncology Parent Support Network, (second from left) and Rosemary Mahan, RN, CPNP, CPON, (second from right) speaking with parents at the inaugural Pediatric Hematology/Oncology Support Services Fair

Michael Schuster, MD, Director, Bone Marrow and Stem Cell Transplantation, and Director, Hematologic Malignancies, greeting one of his guests, Phyllis Antonucci, at the Celebration of Life cruise

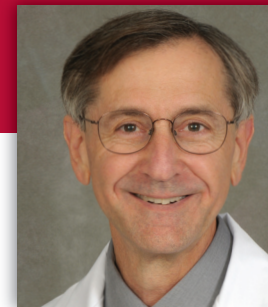
Kenneth Kaushansky, MD, Senior Vice President, Health Sciences, and Dean, Stony Brook School of Medicine, presenting the keynote address at the Celebration Breakfast honoring clinical trial participants, held as part of National Cancer Survivors Day

Adam Korzenko, MD, Director, Pigmented Lesion Clinic, examining a patient during the annual Skin Cancer Screening

[stonybrookmedicine.edu](http://stonybrookmedicine.edu)

# Welcome to Stony Brook Medicine

## A Message from Leadership



**Kenneth Kaushansky, MD, MACP**  
Senior Vice President, Health Sciences  
Dean, Stony Brook School of Medicine



**Fred Sganga, FACHE**  
Interim CEO,  
Stony Brook University Hospital  
Executive Director, Long Island State Veterans Home



**Lee Anne Xippolitos, RN, PhD**  
Chief Nursing Officer,  
Stony Brook Medicine  
Dean, Stony Brook School of Nursing

**Welcome to Stony Brook Medicine.** As Long Island's premier academic medical center, we offer advanced cancer care with top physicians, groundbreaking research and innovative procedures that attract patients throughout the U.S. and internationally. While our programs are widely recognized and far-reaching, we have a deep-rooted commitment to the community — providing a host of outreach and support services to improve the quality of life for individuals with cancer. *(See pages 30 and 31 for a sampling of programs.)*

This report highlights the people, technology and techniques that make up our Cancer Care Program, and provides a full picture of the depth and breadth of our services. Our bench and translational research programs remain robust, with teams of physician-scientists dedicated to advancing the study and treatment of cancer. Our primary focus, however, is delivering compassionate and leading-edge care. We continually ask ourselves: How can we improve the patient's quality of life during treatment? What is the best way to support the family? How can we help a child smoothly re-enter the classroom? What complementary therapies can the patient engage in to promote healing? To which community resources can we connect patients post-discharge? How can we further advance the treatment and safety of our patients?

In fact, patient safety was a major focus during the past year. March 2011 marked the one-year anniversary of "Patient Safety Fridays," an initiative where we enhanced the safety culture at Stony Brook Medicine in measurably significant ways. With the participation of physicians, leadership and unit-based teams, we systematically improved outcomes and pain management, purchased more than 300 pieces of medical equipment, instituted numerous process changes, improved hand hygiene and implemented electronic medical record solutions. This year-long effort was so successful that the program evolved into what is now called "Patient Safety First." The processes and initiatives are woven into our everyday culture of safety and integral to everything we do.

We invite you to review this report and see how Stony Brook Medicine delivers cancer care: mission-driven and guided by best practices and innovation. Our team-based approach allows collaboration with some of the sharpest minds in healthcare. And, our strong emphasis on patient and family centered care continually fuels our passion to meet the needs of those we serve.

## ABOUT STONY BROOK MEDICINE

### Our Mission

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

### Our Values

Stony Brook Medicine 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 research and training

### Our Role in the Community

**The Only Tertiary Care Center in Suffolk County.** Stony Brook University Hospital 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 5,500 employees and 584 full-time physicians, we are the largest hospital in Suffolk County and one of the largest employers. University Hospital has 597 approved beds. Annually, we treat more than 31,000 inpatients and 230,000 outpatients, and perform more than 20,000 surgical cases.

**A Regional Resource.** The only Level 1 Trauma Center in Suffolk County, Stony Brook is the regional referral center for trauma. We are a referral center for stroke and stroke intervention; perinatal and neonatal intensive care; burn care; amyotrophic lateral sclerosis (ALS);

pediatric and maternal HIV/AIDS; pediatric and adult multiple sclerosis; comprehensive sickle cell disease services; and psychiatric emergency services.

#### A Pipeline for the Next Generation of Physicians and Medical Professionals

Stony Brook Medicine trains medical professionals through the University's School of Medicine and the Health Sciences Schools, which include Dental Medicine, Health Technology and Management, Nursing, and Social Welfare. Stony Brook offers residencies in 20 medical specialties and 29 fellowships. The medical school, residency and fellowship programs attract gifted physicians-in-training from around the country, and with them all the benefits they offer to the community: access to the latest best practices, the lively exchange of ideas, the commitment to education and innovation, and access to highly specialized expertise.

#### A Hotbed of Research and Innovation.

Stony Brook has a tradition of groundbreaking research going back to the days when one of our scientists shared the Nobel Prize in Physiology or Medicine for his contributions to the then newly emerging magnetic resonance imaging (MRI) technology. Stony Brook Medicine is home to basic research laboratories and new and ongoing studies, some of which originate at Stony Brook and others that are part of multisite national clinical trials. Our research covers basic, translational, clinical, biomedical, biotechnology and new technology and drug development. Many of our researchers hold patents, and several of our core departments work directly with medical technology manufacturers to test and perfect next-generation equipment, resulting in giving our patients early access to the latest technology.

#### How We Have Grown

In keeping with our mission and our commitment to serving the community, Stony Brook has continued to expand facilities and services. Some recent highlights include:

**Stony Brook Children's.** Last year, Stony Brook announced the creation of its new children's hospital — the first in Suffolk County. Currently a "hospital-within-a-hospital," it has grown from a foundation of pediatric excellence, and now has more than 100 physicians practicing in 30 pediatric specialties and subspecialties. Stony Brook University Hospital built a new dedicated pediatric Emergency Department, and we recently opened a new Neonatal Intensive Care Unit, making us the first in New York State with all private rooms.

#### Stony Brook Neurosciences Institute.

Composed of 10 highly specialized centers plus a core neurosciences program, the Institute continues to recruit top physicians and invest in latest-generation technology. Its Cerebrovascular and Stroke Center features highly advanced technology, a biplane angiography suite equipped with the Siemens Artis® zee with syngo DynaCT™ neuro systems, and has a world-class neuroendovascular replicator and research laboratory. In addition, the Center's physicians have been among the first in North America to perform groundbreaking procedures.

#### Awards and Recognition

Stony Brook Medicine is continually recognized for clinical excellence, outstanding outcomes, patient satisfaction and overall quality and value. Following are some of our recent awards.

- Recipient of the Consumer Choice Award from the National Research Corporation (NCR), for the third consecutive year. The award for 2010-11 honors Stony Brook as the highest rated hospital in the New York; Newark, NJ; and Edison, PA, metropolitan statistical areas

for Best Doctors, Best Nurses, Best Overall Quality and Best Overall Image/Reputation.

- Recipient of The Joint Commission S3 rating, which ranks Stony Brook even higher than the "Best Hospitals" average.
- National accreditation from The Joint Commission for the Ventricular Assist Device (VAD) Program at Stony Brook Heart Institute. Stony Brook's program is the only accredited VAD program on Long Island.
- National certification from The Joint Commission as an Advanced Primary Stroke Center. Stony Brook is one of 12 hospitals in New York State to earn this advanced certification.
- Recipient of the 2011 Safety Net Patient Safety Award by the National Association of Public Hospitals and Health Systems (NAPH). The award is given to organizations for implementing evidence-based patient safety initiatives. Stony Brook was cited specifically for its efforts in the reduction of severe sepsis mortality.
- National recognition for the "Patient Safety First" program in a report by the National Association of Public Hospitals (NAPH) in collaboration with the National Patient Safety Foundation and Kaiser Permanente Community Benefit Fund.
- Recipient of the U.S. Department of Health and Human Services' Organ Donor Bronze Medal of Honor, recognizing Stony Brook's 83 percent conversion rate for the period of October 2008 through March 2010 for the third time in four years. Stony Brook is one of only eight hospitals in New York State and the only one on Long Island to receive this award.
- Ranking as first on Long Island in the 2010 annual state report by the non-profit Niagara Health Quality Coalition. Areas recognized include heart attack and congestive heart failure rates, which were among the lowest, as well as patient satisfaction.

## Cancer Care at Stony Brook Cancer Center

### A Message from Cancer Program Leadership



## 2011

### Cancer Care Program Leadership

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

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

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

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

#### Stony Brook Medicine held its seventh annual Cancer Survivors Day.

Although Stony Brook Medicine hosts many community events throughout the year, this one is special. It is living proof that our approach to cancer is working. Many of our patients are not only surviving, they are thriving — and nothing makes us happier than celebrating another year of life with them. Plus, this annual celebration underscores the cancer program's commitment to survivorship and building long-term relationships in the community. Celebrating with this year's group were two notable cancer survivors themselves: Ted Kennedy Jr. and Ann Jillian. (See page 41 for more.)

A highlight of the day was the Celebration Breakfast honoring

Stony Brook Medicine patients who participated in clinical trials during their treatment process. Without their participation, the continued advances that lead to new treatment and cures would not be possible. At the breakfast, we shared the cancer program's plans to build a state-of-the-art translational medical research building on the Stony Brook Medicine campus that will focus on cancer research, advanced imaging and new technology to advance cancer care even further.

#### CANCER CARE PROGRAM HIGHLIGHTS, 2010-2011

##### Expanded Programs

- Under the leadership of world-renowned hematologist Michael Schuster, MD, Director, Bone Marrow and Stem Cell

Transplantation, and Director, Hematologic Malignancies, the number of stem cell transplants in adults has tripled in the past year. The program also began performing unrelated donor and umbilical cord transplants, and is currently readying for haploidentical transplants. Stony Brook will be the only center on Long Island with this capability.

- The addition of Tara Huston, MD, to the Division of Plastic and Reconstructive Surgery brings even more expertise — honed at Weill-Cornell/New York-Presbyterian Hospital, Memorial Sloan-Kettering Cancer Center and the Hospital for Special Surgery — to the breast cancer team. The team is a pioneer in breast reconstruction techniques, including total skin- and nipple-sparing breast surgery.



Stony Brook Cancer Center

### Groundbreaking Surgeries

- In February 2011, Robert Bergamaschi, MD, PhD, Chief, Division of Colon and Rectal Surgery, performed the first intracorporeal laparoscopic colorectal surgery on Long Island in which the diseased sections of the colon can be removed through tiny incisions in the skin. Dr. Bergamaschi is just one of a few physicians worldwide performing this technique.
- In October 2010, the first salivary endoscopy procedure in Suffolk County was performed at Stony Brook by Ear, Nose and Throat (ENT) surgeons Ghassan J. Samara, MD, and Mark F. Marzouk, MD. This minimally invasive technique spares the gland without risk to vital structures and can be used for diagnosis or removal of scar tissue caused by chemotherapy or radiation for thyroid cancer. Drs. Samara and Marzouk have also pioneered minimally invasive ENT surgery using the da Vinci® S HD™ Surgical System to diagnose and treat cancers of the mouth, throat and tongue.
- In 2009, the Upper Gastrointestinal Oncology Management Team, led by internationally renowned surgeon Kevin Watkins, MD, was the first in the world to treat unresectable pancreatic cancer with irreversible electroporation (IRE). The team continues to be a leader in this technique, in addition to performing breakthrough minimally invasive techniques that draw patients from across the country.

### Attracting World-Class Physicians

Stony Brook's Cancer Care Program continues to attract world-class physicians. Three leading doctors who have recently been recruited include:

- **Sajive Aleyas, MD**, one of the few pulmonologists in the country with advanced training in interventional pulmonology and lung cancer. Dr. Aleyas has been appointed Co-Director of Stony Brook's Lung Cancer Evaluation Center, where he brings his specialized expertise in minimally invasive diagnostics and procedures, including his pioneering work in electromagnetic navigation bronchoscopy.
- **Melissa Henretta, MD, MPH**, who has specialized training in robotic surgery for gynecologic cancers. Dr. Henretta completed her fellowship in gynecologic oncology at the University of Virginia, Charlottesville. Her research focuses on public health issues, including comparative effectiveness research in genomic and personalized medicine.
- **Fazel Khan, MD**, one of the few musculoskeletal oncologists in the nation and now the only one on Long Island who is a full-time faculty member at an academic institution. Dr. Kahn's training includes fellowships in orthopedic surgery at the Mayo Clinic in Rochester, Minnesota, and musculoskeletal oncology at Memorial Sloan-Kettering Cancer Center.

### An Emphasis on Research

Research is fundamental to Stony Brook's commitment to advancing the study and treatment of cancer. This was emphasized at a breakfast held on National Cancer Survivors Day® honoring participants in clinical trials. Last year at Stony Brook, ongoing cancer-related research studies looked at everything from selective gene expression and identifying cancer markers to investigating the role environmental toxins and inflammation associated with obesity may play in various cancers.

### Commitment to Community Outreach

Maintaining and continually building upon the strong connection with the community it serves is of the utmost importance to Stony Brook Medicine. Integral to Stony Brook's Cancer Care Program is making available its many resources to members of the community. Outreach is ongoing and includes partnering with local branches of national organizations, developing new support groups for patients and their families, organizing and hosting events for survivors, families and community members, and providing educational classes and seminars, health screenings, physician education and more. *(For more information, see pages 30 and 31.)*

## A Team Approach to Care

### Comprehensive, Multidisciplinary, Patient-Focused

In delivering optimal outcomes for patients with cancer, Stony Brook relies on the collective expertise of its 12 site-specific, multidisciplinary Disease Management Teams. These teams provide a coordinated approach to cancer diagnosis, treatment and follow-up, and give patients comprehensive cancer services across the full spectrum of care.

**Teams** consist of combinations of oncologists with cancer subspecialties, surgeons, hematology/oncology physicians, radiation oncologists, pathologists, radiologists, researchers, nurse practitioners and registered nurses with specialized cancer training, therapists, social workers, and other medical professionals.

For patients, the process starts at diagnosis. Physicians attend Tumor Board conferences and present each patient's case for staging and treatment planning. The treatment plan is based on diagnostic studies, staging, medical and family history, lifestyle and other individual factors. The patient is then assigned a nurse navigator or nurse practitioner who facilitates scheduling, coordination of services, communication among team members, problem solving and matching patients to clinical studies. During treatment, the team confers frequently and updates the plan when needed. The team follows the patient along each phase of care, providing follow-up, educational materials, referrals to community resources

and support groups, and other after-care initiatives. Team members typically establish long-term relationships with patients, which provide continuity of care and help avoid many of the potential problems associated with fragmented care.

**Physician Excellence** This year, 18 Stony Brook physicians were recognized by *New York Magazine* as "Best Doctors" on an annual list compiled by the New York-based research and information company, Castle Connolly. Among these exceptional physicians, a total of seven are part of the Cancer Care Program. These include:

- Mary Andriola, MD**, Child Neurology
- Raphael Davis, MD**, Neurological Surgery
- Thomas Lee, MD**, Pediatric Surgery
- Robert Parker, MD**, Pediatric Hematology/Oncology
- Todd Rosengart, MD**, Thoracic Surgery
- Michael Schuster, MD**, Hematology/Oncology
- Carmen Tornos, MD**, Pathology

## Breast Cancer Management Team

### OVERVIEW

The only comprehensive academic program of its kind on Long Island, the Breast Care Program offers the most advanced treatment available for breast cancer. Last year, the program treated 450 new patients with cancer. At the Carol M. Baldwin Breast Care Center, located in the Cancer Center outpatient facility, breast imaging specialists performed more than 13,900 mammograms and 3,900 sonograms. A highly specialized genetic counselor, for women who may have inheritable breast cancer, is available. Women also have access to a comprehensive lymphedema evaluation and treatment program.

The Breast Care Center has been a pioneer in many ways, including being the first on Long Island to offer digital mammography, and among the first to be equipped with a 3-D digital mammography (breast tomosynthesis) system, which is ideal for women with dense breast tissue. 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.



Brian O'Hea, MD, Mary Zegers, RN, and Jeanmarie Piotrowski, RN, (right) with patient

### HIGHLIGHTS

**Groundbreaking Certification.** The Breast Care Center was the first in New York State to earn full accreditation by the National Accreditation Program for Breast Centers (NAPBC). During the review, the Center met or exceeded all 27 standards. It continues to be fully accredited by the NAPBC.

**Leading-Edge Radiation Treatments.** Stony Brook's breast surgeons and radiation oncologists are 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 Breast Care Program also offers partial breast radiation via 3-D 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. Patients who have resistant tumors may also meet qualifications to receive phase II experimental agents.

**Pioneering Breast Reconstruction Techniques.** The program has a dedicated team of plastic and reconstructive surgeons that is actively involved in research to facilitate better cosmetic results from reconstructive surgery. The team is a leader in using the new Endoscopic SPY Imaging System, a groundbreaking technology that evaluates the health of the skin left post-mastectomy. It also is pioneering total skin- and nipple-sparing mastectomy, which helps to improve the appearance of the reconstructed breast. Recently, Tara Huston, MD, a fellowship-trained plastic and reconstructive surgeon, joined the team. The focus of her research is on novel cosmetic reconstruction following breast cancer surgery.

**Research.** The Breast Care Program is closely linked with the Carol M. Baldwin Research Fund, a not-for-profit organization that to date has awarded research grants totaling more than \$3 million.

**Clinical Trials.** Stony Brook participates in clinical trials and basic research. We recently opened a new clinical trial using Herceptin® (trastuzumab injection) to target cancer cells that overexpress the gene HER2/neu for early-stage ductal carcinoma in situ (DCIS) breast cancer. The study aims to reduce the relapse rate after radiation therapy and lumpectomy.

### Team Members

**Surgery:** Brian O'Hea, MD, Team Leader and Director, Carol M. Baldwin Breast Care Center; Martyn Burk, MD; Patricia Farrelly, MD; Christine Rizk, MD  
**Plastic and Reconstructive Surgery:** Duc Bui, MD; Jason Ganz, MD; Tara Huston, MD; Sami Khan, MD; Mary Zegers, RN, BSN, CNOR, Patient Care Coordinator  
**Pathology:** Meenakshi Singh, MD; Carmen Tornos, MD; Jingxuan Liu, MD, PhD  
**Breast Imaging:** Jayne Bernier, MD; Cliff Bernstein, MD; Paul Fisher, MD; Sheri Ford, MD; Roxanne Palermo, MD  
**Radiation Oncology:** Allen G. Meek, MD, Chair and Clinical Director, Department of Radiation Oncology; Tae Park, MD  
**Medical Hematology/Oncology:** Jules Cohen, MD; Andrzej Kudelka, MD; Janice Lu, MD  
**Genetic Counseling:** Berrin Ozturk, MD  
**Breast Center Nursing:** Jeannie Gaspard RN, ANP, OCN, NEA-BC, Assistant Director of Nursing; Trisha Fideli, RN, Nursing Supervisor; Lynette LeePack-May, NP; Jeanmarie Piotrowski, RN; Laura Vogeli, RN, Nurse Navigator

## Colorectal Oncology Management Team

### OVERVIEW

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



Roberto Bergamaschi, MD, PhD, (second from right) leading a discussion with his team during a weekly patient consultation meeting

### 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.

**Advanced Surgical Techniques.** Stony Brook is home to one of only several colorectal surgeons in the United States who have mastered the intracorporeal laparoscopic colorectal

surgery technique — Division Chief Roberto Bergamaschi, MD, PhD. This laparoscopic technique allows surgeons to remove diseased sections of the colon through three tiny incisions in the skin. The incisions are large enough to enable the laparoscope to travel further into the body cavity and view the area surrounding the colon at two times the magnification level, ensuring that all the lymph nodes are removed during colorectal cancer surgery.

Stony Brook colorectal surgeons also use the da Vinci® S HD™ Surgical System, which is a high-tech 3-D endoscopic system with state-of-the-art robotic technology that serves as a virtual extension of the surgeon's eyes and hands.

**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. The research team is participating in the multicenter American College of Surgeons Oncology Group (ACOSOG) trial "A Phase III Prospective Randomized Trial Comparing Laparoscopic-Assisted Resection Versus Open Resection for Rectal Cancer." The study tests the hypothesis that laparoscopic-assisted resection for rectal cancer is not inferior to open rectal resection, based on a composite primary endpoint of oncologic factors that are indicative of a safe

and feasible operation under the auspices of the National Cancer Institute.

**Staging.** Patients with rectal cancer undergo staging via endorectal ultrasound and positron emission tomography/computed tomography (PET/CT) scan or endocoil magnetic resonance imaging. Neoadjuvant treatment preceding surgery consists of combined chemotherapy and radiation.

**Pioneering Approach.** The team uses TAMIS (transanal minimally invasive surgery), which facilitates resection of large rectal tumors in select patients who would otherwise require a radical operation. Also, Stony Brook is the only hospital in Suffolk County offering heated intraperitoneal chemotherapy (HIPEC) to kill any remaining cells after resection of advanced cancer.

**Screening.** Because early detection is so important, Stony Brook has worked to make colonoscopies a gentler experience for patients. For example, colonoscopies are performed under short, fast-working and deep sedation that has minimal side effects, including no memory of the procedure, and many different kinds of bowel preparations are used, including some in pill form. Additional screening methods, including flexible sigmoidoscopy, barium enemas, fecal occult blood testing and CT colonography, also known as virtual colonoscopy, are also offered.

### Team Members

**Colorectal Surgery:** Roberto Bergamaschi, MD, PhD, Team Leader and Chief, Division of Colon and Rectal Surgery; William B. Smithy, MD, Director, Colorectal Fellowship Program; Marvin L. Corman, MD; Paula I. Denoya, MD; Arnold Leiboff, MD; Brett Ruffo, MD; Norman Cruz, NP; Donna Keehner-Nowak, RN; Geraldine Massimino, RN  
**Gastrointestinal Medicine:** Jonathan Buscaglia, MD, Team Leader; Chris Lascardes, MD; Satish Nagula, MD; Ramona Rajapakse, MD; Robert Richards, MD; Isabelle von Althen, MD  
**Pathology:** Sui Zee, MD  
**Radiology:** Seth O. Mankes, MD  
**Radiation Oncology:** Bong Soon Kim, MD  
**Medical Hematology/Oncology:** Marisa Siebel, MD  
**Enterostomal Therapy:** Karen E. Chmiel, RN; Susan Guschel, RN

## Gynecologic Oncology Management Team

### OVERVIEW

The Gynecologic Oncology Management Team treats cancers of the ovary, uterus (endometrium), cervix, vulva and vagina, as well as in the peritoneum and fallopian tube. Together, these cancers account for 13.3 percent of the new cancers diagnosed in women annually in the U.S. Although substantial strides have been made, gynecologic cancers still account for 10 percent of cancer deaths annually in women. The Division of Gynecologic Oncology is the only academic subspecialty gynecologic oncology practice in Suffolk County. The Division has three overlapping goals: to provide comprehensive, multidisciplinary care for women with known or suspected gynecologic cancers, as well as for those with complicated gynecologic surgical and selected preinvasive conditions; to conduct research into the development and treatment of these cancers; and to educate healthcare professionals and the public about gynecologic cancers and precancerous conditions.

In 2010, there were 2,445 office visits and 461 new patients. Because the Division is directly involved with all aspects of patient care, long-term relationships with patients often are established, providing superb continuity of care.

### Team Members

**Surgery and Chemotherapy:** Michael Pearl, MD, FACOG, FACS, Team Leader, and Director, Division of Gynecologic Oncology; Melissa Henretta, MD, MPH; Dayna McCauley, PharmD, BCOP; Marlo Dombroff, RPA-C, Physician Assistant; Sylvia Macco, RN; Michelle Burke, GOG Data Manager  
**Medical Hematology/Oncology:** Andrzej Kudelka, MD  
**Pathology:** Meenakshi Singh, MD; Carmen Tornos, MD  
**Radiation Oncology:** Edward Valentine, MD; Tamara Weiss, MD  
**Research Collaborators:** Wen-Tien Chen, PhD, Medicine; Margaret McNurlan, PhD, Surgery



Michael Pearl, MD, and patient

### HIGHLIGHTS

**Surgery.** Michael Pearl, MD, Director, Division of Gynecologic Oncology, performs all surgical procedures, including radical pelvic surgery and exenteration, and gastrointestinal, urological, and reconstructive plastic surgeries for the management of preinvasive and invasive gynecologic disease, as well as selected complicated gynecologic disorders. In 2010, 218 major and 75 minor surgical procedures were performed.

**Chemotherapy.** The Division has extensive experience administering intravenous, oral and intraperitoneal chemotherapy. In 2010, the Division administered 400 chemotherapy cycles — a 69 percent increase over the previous year. The multidisciplinary team includes physicians, a clinical pharmacist, a physician assistant and chemotherapy-certified nurses.

**Radiation.** The team works closely with the Department of Radiation Oncology to develop treatment plans and place brachytherapy devices.

**Research.** Division members conduct clinical and basic science research. Dr. Pearl is the principal investigator for the Gynecologic Oncology Group (GOG), a national research organization funded by the National Institutes of Health to provide

patients with access to cutting-edge therapy. At any given time, approximately 25 chemotherapy trials are available for women with a variety of gynecologic cancers. In 2010, 55 patients were enrolled in GOG protocols. The Division works on collaborative projects with scientists in several departments. These include working with Wen-Tien Chen, PhD, Department of Obstetrics, Gynecology and Reproductive Medicine, to develop a method to identify early carcinoma antigens in patients with ovarian cancer using DNA microassay techniques, and working with Margaret McNurlan, PhD, Department of Surgery, to investigate the role of inflammation in the metabolic dysfunction associated with obesity and the development of endometrial cancer. In 2010, 50 patients were enrolled in intramural studies and 118 patients were entered into the institutional Tissue Bank.

**Education.** Didactic and clinical education is provided for medical students, resident physicians, nurses and physician assistant students in the University Hospital and in ambulatory settings. The Division participates in local, regional, national and international Grand Rounds. Members inform the community about prevention, diagnosis and management of gynecologic cancers through support groups and lectures.

## Head and Neck, Thyroid Cancer Management Team

### OVERVIEW

The Head and Neck, Thyroid Cancer 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 the oral cavity, pharynx, larynx, nasal cavity, nasopharynx, sinuses and skull base. The team focuses on multidisciplinary 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 major goals are cure, when possible, and controlling manifestations of the disease and maintaining 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 team may use 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.

### Team Members

**Surgery:** Ghassan Samara, MD, Team Leader; David Schessel, MD, PhD, Chief, Division of Otolaryngology; Mark Marzouk, MD; Elliot Regenberg, MD; Gerty Fortune, RN, Nurse Navigator; Frances Tanzella, NP  
**Dentistry:** Denise Trochesset, DDS  
**Endocrinology:** Harold Carlson, MD; Marina Charitou, MD; Marie Gelato, MD, PhD; Anoop Kapoor, MD; Igor Kravets, MD; Harmeet Narula, MD; Steven Weitzman, MD  
**Pathology:** Alan Heimann, MD  
**Radiology:** Bruce Chernofsky, DO; Robert Matthews, MD; Steven West, DO; Zengmin Yan, MD  
**Radiation Oncology:** Edward Valentine, MD; Tamara Weiss, MD  
**Medical Hematology/Oncology:** Roger Keresztes, MD; Andrzej Kudelka, MD  
**Speech Pathology:** Kathleen McCloskey, MA, CCC-SLP

### New Minimally Invasive Techniques and Technology.

Stony Brook is the only hospital in Suffolk County offering several new minimally invasive techniques.

- Robot-assisted surgery for ear, nose and throat (ENT) procedures. First performed on Long Island by Ghassan Samara, MD, using the da Vinci® S HD™ Surgical System, this advanced option gives physicians unprecedented visibility and access, allowing them to diagnose and treat cancers of the mouth, throat and tongue, as well as perform microsurgery in areas previously inaccessible. Patient benefits include little to no blood loss, less pain and shorter recovery times. Currently, fewer than 100 surgeons worldwide, and just a few in New York, have been trained on this equipment for this procedure.

- Salivary endoscopy. This procedure allows for examination of the salivary ducts and gland-sparing surgery via an endoscope on an outpatient basis. It can remove scar tissue and lesions such as stones, as well as treat inflammation and improve function following radiation and chemotherapy used in the treatment of cancers in the head and neck and thyroid. Mark Marzouk, MD, performed the first salivary endoscopy in Suffolk County in October 2010.

- Minimally invasive video-assisted thyroidectomy (MIVAT) for treatment of thyroid cancers. This technique uses much smaller incisions than traditional thyroidectomy and results in smaller scars and less postoperative pain.

### New Radiation Technology.

RapidArc® is among the most advanced forms of intensity-modulated radiation therapy used to treat patients with head and neck cancers. It delivers beams faster than conventional radiotherapy, resulting in improved patient comfort, faster treatment, more highly targeted radiation and fewer side effects.



Mark Marzouk, MD, performing salivary endoscopic surgery

**Reconstructive Surgery.** Reconstruction of surgical defects after cancer removal restores functionality and aesthetics in the head and neck area.

**Speech Pathology.** Preventive and rehabilitative swallowing therapy helps to improve quality of life for patients at risk or with symptoms of dysphagia.

**Specializations.** The team has expertise in laryngology, general otolaryngology and cancer surgery. David Schessel, MD, PhD, specializes in ear and skull base surgery; Dr. Samara in head and neck, thyroid, parathyroid, skull base, sinus and robotic surgery; Dr. Marzouk in salivary endoscopy, and head and neck and thyroid surgery; and Elliot Regenberg, MD, in larynx and thyroid cancers, and voice and swallowing disorders.

**Research.** Dr. Samara is researching the effect of alcohol on head and neck cancer. Dr. Regenberg's research interest is the development of ultra-high resolution immunofluorescent-based imaging systems for detection and treatment of head and neck cancers.

## Hematologic Malignancy and Stem Cell Transplant Management Team

### OVERVIEW

The Hematologic Malignancy and Stem Cell Transplant Management Team treats blood-related cancers and cancers of the lymphatic system. The modalities used include the most current diagnostic testing, chemotherapy, immunotherapy, radiation, new drug development in clinical trials and stem cell transplantation. Stony Brook's Bone Marrow and Stem Cell Transplantation Program is the only one in Suffolk County specifically designed for patients receiving both autologous and allogeneic 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 together closely to ensure that each patient's needs are met and that the complex transplant 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.



Michael Schuster, MD, and Josephine LoBrutto, NP, with patient and patient's father

### HIGHLIGHTS

**New Leadership.** With Michael W. Schuster, MD, completing his first year as Director of Bone Marrow and Stem Cell Transplantation and Director of Hematologic Malignancies, the program has grown exponentially. This past year transplants in adults tripled in volume and treatments of patients with hematologic malignancies like lymphoma, leukemia and myeloma (*see site survey, page 12*) have likewise risen substantially. The program now performs unrelated donor transplants and umbilical cord transplants. It is currently preparing to begin haploidentical transplants, which will make Stony Brook the only center on Long Island to offer this procedure. The team is also shepherding in promising new treatments for leukemia, lymphoma and multiple myeloma.

**New Staff.** The team added several key staff members this year: Jennifer Sadler, RN, a dedicated research nurse who is responsible for the team's clinical trials; two nurse practitioners, Sylvia Wood, NP, DNP, and Maryann Vagnini, NP; and finance manager, Odelle Daniel, who coordinates the complicated funding, insurance, budget and revenue streams associated with running a transplant center.

**Stem Cell Transplants.** The Blood and Bone Marrow Transplant Unit opened in

1994 and was revamped in 2004 to allow the University Hospital to offer autologous stem cell transplants (where patients use their own stem cells) and allogeneic transplants (where patients use stem cells from a matched donor). The program now offers every type of transplant from umbilical cord blood to unrelated donors. Stony Brook is a National Marrow Donor Program (NMDP) Transplant Center, which means that it can offer patients access to millions of unrelated stem cell donors and umbilical cord blood if no match is found within the family.

**Lymphoma Treatment.** The team offers treatment — much of it curative — for each of the more than 40 types of non-Hodgkin's lymphomas, tailored to the specific type that the individual patient may have. This includes chemotherapy drugs, new classes of drugs, radiation treatment, radioimmunotherapy (a one-time infusion that may prolong remission when used directly after chemotherapy in patients with low-grade lymphoma), immunotherapy and transplantation. In addition, the team also participates in clinical trials of new drugs for patients who relapse after their initial treatment. Some of these clinical trials are only available in one or two centers in the world, such as a new leukemia trial that is available only at the MD Anderson Cancer Center in Houston and Stony Brook Cancer Center.

**Leukemia Treatment.** Although acute leukemia is a relatively rare disease in adults, Stony Brook is working to develop new drugs to treat it both at the time of diagnosis and at the time of relapse. The team is now able to offer stem cell transplants, identical transplants and umbilical cord transplants. The team is also focused on reducing the intensity of the transplants for older patients.

**Professional Affiliations.** Stony Brook is a member of the Cancer and Leukemia Group B (CALGB); the NMDP; and the Center for International Bone Marrow Transplant 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.

**Research.** Dr. Schuster has been principal investigator for more than 150 clinical trials and has worked extensively in the areas of stem cell transplantation, oncology new drug development and the treatment of cancer cachexia. In the past year, 18 new clinical trials, ranging from new drugs and new treatment for hematologic malignancies to promising new drugs for the treatment of acute leukemia in adults, have been initiated. One will be a "first-in-man" trial, a joint effort between Stony Brook and the MD Anderson Cancer Center in Houston. Stony Brook is also one of three centers in the U.S. participating in a groundbreaking haploidentical transplant trial.

Hematopathologist Yupo Ma, MD, PhD, formerly of the Nevada Cancer Institute, is helping to grow the translational research program. He is a leading researcher in the diagnosis of leukemia and lymphoma, as well as the potential to use adult stem cells to treat hemophilia and other diseases.

**Patient Care.** The team provides comprehensive, long-term care for patients. Special attention to specific needs includes things such as a dedicated waiting room at the Cancer Center for transplant patients to limit their exposure to germs because of their compromised immune systems.

## Multiple Myeloma Site Survey

Treatment modalities include chemotherapy, radiation therapy, and bone marrow and peripheral blood stem cell transplant.

**Multiple myeloma is a neoplastic disorder** characterized by the proliferation of a single clone of plasma cells, immune cells that function normally to secrete antibodies. These cells grow in the bone marrow and frequently invade adjacent bone, destroying the bone and resulting in pain and fractures. Multiple myeloma is diagnosed by the presence of monoclonal plasma cells in the bone marrow, M-protein detected in blood or urine, and bone lesions seen on imaging studies. Renal function is tested because the monoclonal proteins can lodge in the kidneys and impair kidney function.

Although common clinical findings are bone pain, fractures, hypercalcemia and renal insufficiency, patients might be diagnosed at an early stage by their family doctors because of an elevated protein level in the blood or because of anemia. Further investigation reveals monoclonal proteins, excess protein made by the malignant myeloma cells. Patients are then referred to a hematologist for further workup of the disease and subsequent treatment. The full range of myeloma diagnostic and therapeutic services is offered at the Stony Brook Cancer Center, which specializes in the treatment of the disease.

National Cancer Institute's data indicate the median age at diagnosis to be 69 years. An increasing number of patients from the greater New York area (*see accompanying tables on page 12*) are seeking their treatment here because of the expertise and the novel treatment available at Stony Brook Cancer Center.

### Multiple Myeloma Site Survey References

- American Cancer Society. (2010). *Cancer facts and figures*. Retrieved May 5, 2011, from [www.cancer.org](http://www.cancer.org)
- American Joint Committee on Cancer. (2010). *Cancer staging manual* (7th ed.). Chicago, IL: Springer.
- National Cancer Institute. (n.d.) *Myeloma section, surveillance epidemiology and end results (SEER)*. Retrieved May 5, 2011, from [www.seer.cancer.gov/csr/1975\\_2008/index.html](http://www.seer.cancer.gov/csr/1975_2008/index.html)
- National Cancer Institute. (n.d.) *Myeloma section, surveillance epidemiology and end results (SEER)*. Retrieved May 5, 2011, from [www.seer.cancer.gov/statfacts/html/mulmy.html](http://www.seer.cancer.gov/statfacts/html/mulmy.html)
- American College of Surgeons Commission on Cancer. (2010, September 15). National cancer data base survival reports. Retrieved May 5, 2011, from [www.facs.org/cancer/incdb/survivalreportuser.pdf](http://www.facs.org/cancer/incdb/survivalreportuser.pdf)
- National Cancer Institute. (n.d.) Plasma cell neoplasms including multiple myeloma. Retrieved May 5, 2011, from [www.cancer.gov/cancertopics/pdq/treatments/myeloma/healthprofessional](http://www.cancer.gov/cancertopics/pdq/treatments/myeloma/healthprofessional)

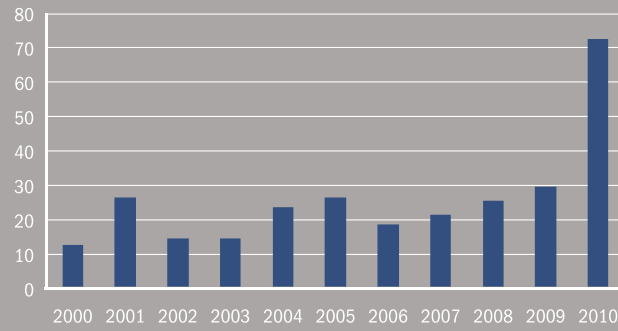
Predictors of aggressive disease associated with a poor outcome are chromosomal abnormalities such as the deletion of chromosome 13, plasmablastic morphology or circulating plasma cells. An international staging system now also uses serum albumin and Beta 2 microglobulin. Tailored therapies for patients with these risk factors are offered at Stony Brook Cancer Center.

Myeloma treatment has undergone dramatic changes over the past several years with vastly superior results, longer remissions and improved survival. Novel drugs (including Revlimid® and Velcade®, which Dr. Schuster helped develop) and drug combinations have led to response rates as high as 90 to 100 percent. Stem cell transplants have helped people stay in remission for longer periods of time. Bisphosphonates, bone-strengthening drugs, help prevent the myeloma cells from attacking the bone.

Exciting research is underway at Stony Brook including testing new drugs for relapsed myeloma and designing ways to improve the results of stem cell transplants. Stony Brook's myeloma program is one of the few in the world to offer stem cell transplants without blood transfusions for patients whose religious beliefs might not allow them to receive transfusions. These promising developments for our patients with myeloma and ongoing research have made this once rapidly fatal malignancy a much more treatable disease.

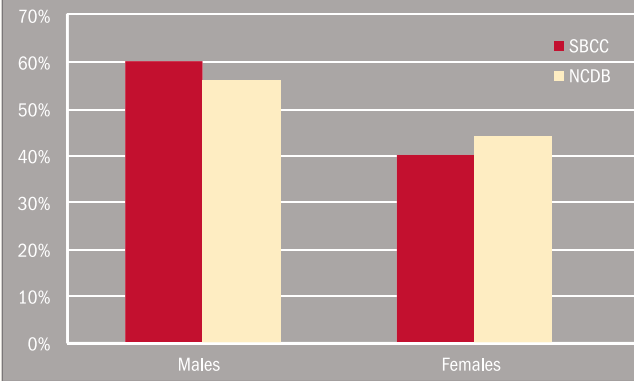
### Multiple Myeloma: Patient Incidence

Stony Brook Cancer Center (SBCC) 2000-2010  
Patients first seen at SBCC for new diagnosis or re-evaluation



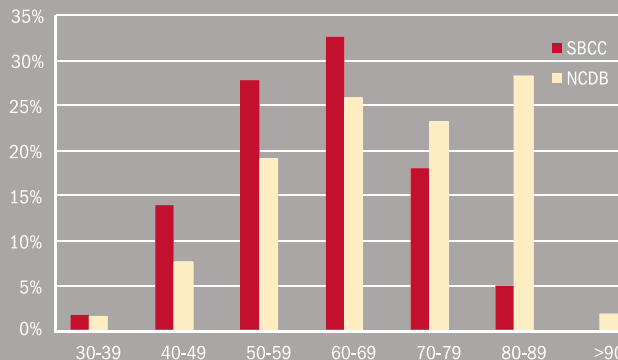
### Multiple Myeloma: Incidence by Gender

Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)



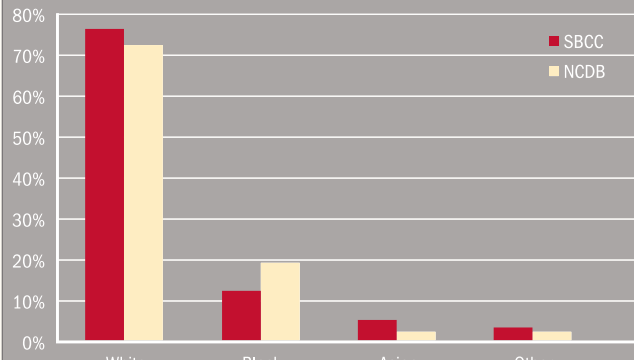
### Multiple Myeloma: Age at Diagnosis

Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)



### Multiple Myeloma: Incidence by Race

Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)



### Multiple Myeloma: Patient Insurance

Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

	Not Insured	Private Insurance	Managed Care	Medicaid	Medicare	Medicare with Supplement	Veteran or Military
SBCC	6%	2%	41%	11%	9%	28%	1%
NCDB	3%	11%	24%	4%	17%	35%	3%

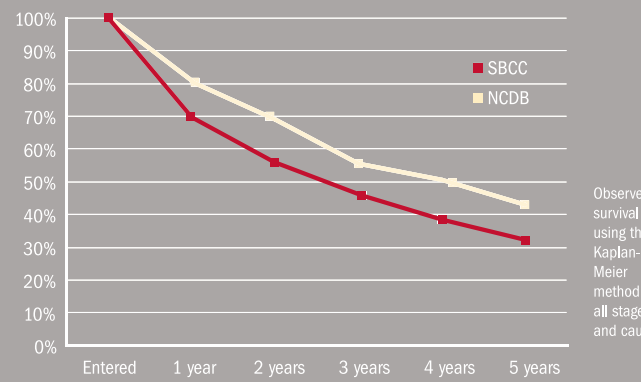
### Multiple Myeloma: Treatment Modalities

Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

	Chemotherapy	Radiation	Chemotherapy and Radiation	Other/Hematologic/Transplant	None
SBCC	19%	8%	15%	29%	19%
NCDB	20%	10%	8%	24%	23%

### Multiple Myeloma: Five-Year Observed Survival

Stony Brook Cancer Center (SBCC) (63 cases from 2003-2005) vs. National Cancer Data Base (NCDB) (7,766 cases from 2003 at 1,215 programs)



## Lung Cancer Management Team

### OVERVIEW

The Disease Management Team at the Lung Cancer Evaluation Center 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 and cryoablation; image-guided radiotherapy; positron emission tomography/computed tomography (PET/CT) fusion imaging scanning; interventional bronchoscopy, including endobronchial ultrasound biopsy transbronchial needle aspiration (EBUS-TBNA); electromagnetic navigation bronchoscopy; stenting; transbronchial needle aspiration for nonsurgical diagnosis; and staging with



Sajive Aleyas, MD, Sunday Campolo-Athans, NP, and Thomas Bilfinger, MD

on-site pathology, cauterization, laser and brachytherapy. Five-year results for these less invasive modalities have just become available, and they are very favorable.

### Interventional Pulmonology.

Stony Brook is a national leader in non-traditional ablative therapies, with some of the most extensive experience in the field. With the recruitment of Sajive Aleyas, MD, one of fewer than 100 physicians nationwide and the only doctor on Long Island with advanced training in interventional pulmonology, the Center now offers a new level of expertise in minimally invasive and interventional techniques for the treatment of lung cancer. Dr. Aleyas uses endobronchial ultrasound for the staging of lung cancer, allowing him to biopsy nodes through the mouth or nose. He is also doing pioneering work in electromagnetic navigation bronchoscopy, a minimally invasive approach that uses CT scans to locate malignant pulmonary tumors.

**Surgery.** Thoracic surgery remains the preferred treatment for curative intent,

and procedures performed include pneumonectomy, lobectomy, video-assisted thoracoscopic surgery (VATS) lobectomy, wedge resection, thoracoscopy, mediastinoscopy, tumor debulking and microdebridement. The program has outstanding five-year results compared to national data.

**Low Mortality Rates.** The mortality associated with procedures performed at Stony Brook has been consistently better than the reported national average of three to five percent. The program is participating in the Society of Thoracic Surgeons (STS) national database.

**Clinical Trials.** Patients can participate in ongoing protocols in every phase of diagnosis and treatment. With National Institutes of Health funding, an in-house study looking at cognitive function in thoracic surgery patients has been developed.

**Additional Services.** Because the team is dedicated to comprehensive care, it also supports patients emotionally through a support group.

### Team Members

- Surgery:** Thomas V. Bilfinger, MD, Team Leader, Chief, Thoracic Surgery, and Co-Director, Lung Cancer Evaluation Center; Sunday Campolo-Athans, NP; April Plank, NP; Lisa Repper, RN, Nurse Navigator; Maureen Farrell, Administrative Assistant
- Pulmonary Medicine and Interventional Bronchoscopy:** Sajive Aleyas, MD, Co-Director, Lung Cancer Evaluation Center
- Pathology:** Philip Kane, MD
- Radiology:** William Moore, MD
- Radiation Oncology:** Bong Soon Kim, MD
- Medical Hematology/Oncology:** Roger Keresztes, 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, which counts more than 13,000 outpatient visits annually. 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 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 Tumor Board meetings to establish optimum treatment. All patients are entered into a melanoma database, which tracks patient population and outcomes. Stony Brook is the major melanoma treatment center in Suffolk County, seeing approximately 150 new cases per year.



Colette Pameijer, MD, Claire Smith, RN, and Adam Korzenko, MD

### HIGHLIGHTS

**Advanced Treatment.** Stony Brook offers 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.

**Clinical Trials.** The team strives to make clinical trials available to all patients. Some are national and others are Stony Brook's own. Currently, Stony Brook has high accrual rates into its psychosocial and tumor profiling studies.

**Tissue Bank.** The team's tissue bank of melanoma specimens provides detailed information that, when combined with the clinical database, may help find indicators for risk of recurrence. This could then guide treatment decisions.

To ensure continuity of care, the team also has a patient network database containing information on visits and dates of skin examinations and screenings.

**Community Screenings and Outreach.** During Melanoma Awareness Month in May, the team held its sixth annual skin screening at the Stony Brook Cancer Center. It was available free to adults age 18 and over; those without insurance were encouraged to attend. Other outreach initiatives by the team of physicians and nurses included high school health education classes and participation in Stony Brook's Kids Health and Safety Expo.

**Skin Cancer Clinic.** To provide improved access to treatment for patients with skin cancer, the Department of Dermatology holds a skin cancer clinic at the Cancer Center. It is coordinated with the melanoma clinic, which is led by Colette Pameijer, MD, of the Surgical Oncology service.

### Team Members

**Surgical Oncology:** Colette Pameijer, MD, Team Leader; Barbara Smith, NP; Claire Smith, RN, Nurse Navigator; Patricia Pugliani, PhD, Research Manager

**Dermatology:** Evan Jones, MD, Chair, Department of Dermatology; Peter Klein, MD; Adam Korzenko, MD

**Pathology:** Jason Cohen, MD; 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, offers interdisciplinary consultation, advanced diagnostic methods and treatment planning. A highly skilled team of physicians, nurse practitioners and physician assistants provide specialized care to adult and pediatric patients with brain tumors, spinal tumors and acoustic neuromas. The team works with both the Neuro-Oncology Center, which specializes in brain and spinal tumors and tumor embolization, and the Skull-Base Surgery Center, which includes specialists in pituitary tumors and skull-base tumors. Both are part of Stony Brook's Institute for Advanced Neurosciences.



Agnieszka Kowalska, MD, and Hermina Munoz, RN

### HIGHLIGHTS

**Advanced Imaging.** With the Department of Radiology, the team uses advanced imaging technology for diagnosis, including high-field magnetic resonance imaging (MRI), MR angiography, MRI spectroscopy, diffusion and perfusion with MRI, computed tomography (CT) scanners with CT angiography and blood-flow, single-photon emission computed tomography (SPECT) and positron emission tomography (PET) scans. It also uses volume metric analysis for tumors to determine size.

**Advanced Techniques.** The team's neurosurgeons use advanced techniques and equipment such as image-guided neuro-navigation, microsurgery, intraoperative 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 provides preoperative embolization; intra-arterial delivery of chemotherapy and intraoperative angiography; minimal-access spinal surgery; and stereotactic radiosurgery.

**Clinical Research.** Because clinical research is a major component of an academic medical center, the team is actively involved in clinical research projects. It is part of the Radiation Therapy Oncology Group, a national clinical coop-

erative funded by the National Cancer Institute, and participates in its research protocols when appropriate.

Currently, several promising projects have been initiated at Stony Brook. One 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 predict response, early relapse and the side effects of cancer treatment. Built upon its previous positive result of intracarotid chemotherapy for brain tumors, the research team is now investigating its combination with novel agents for further improvement. A second study is a phase I trial that looks at novel techniques for delivering chemotherapeutic agents directly into the brain via a small port. Also being developed by the team is a new phase II/phase III clinical trial for patients with malignant brain tumors investigating the effect of high doses of antioxidants when added to chemotherapy on survival rates.

**Patient Outreach.** The team is committed to a comprehensive approach to patient care, and facilitates ongoing follow-up as well as continuity of care within the University Hospital. A support group for patients with brain tumors is being planned.

### Team Members

**Neurosurgery:** Raphael Davis, MD, Team Leader and Chair, Department of Neurologic Surgery, Neurosurgeon, Co-Director, Institute for Advanced Neurosciences; Michael Egnor, MD, Neurosurgeon, and Vice Chair and Director, Pediatric Neurosurgery; David J. Fiorella, MD, PhD, Neurointerventional Radiology and Endovascular Specialist, Co-Director, Cerebrovascular and Stroke Center; Robert Galler, DO, Neurosurgeon and Co-Director, Comprehensive Spine Center; Frederick Gutman, MD, Neurosurgeon, Neuro-Oncology, Stereotactic Radiosurgery, and Minimally Invasive Spine Specialist; Jonathan Raanan, MD, Interventional Physiatrist, Non-Surgical Spine Specialist; Arthur Rosiello, MD, Neurosurgeon, Neuro-Oncology, Stereotactic Radiosurgery, and Minimally Invasive Spine Specialist; Henry Woo, MD, Cerebrovascular and Endovascular Neurosurgeon, Co-Director, Cerebrovascular and Stroke Center

**Surgery, Otolaryngology, Neurology:** David Schessel, MD, PhD

**Neuro-Oncology, Department of Neurology:** Agnieszka Kowalska, MD

**Pathology:** Roberta Seidman, MD

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

**Radiation Oncology:** Allen Meek, MD, Chair and Clinical Director, Department of Radiation Oncology; Tae Park, MD; Edward Valentine, MD

**Medical Hematology/Oncology:** Shenhong Wu, MD, PhD

## Pediatric Oncology Management Team

### OVERVIEW

The Pediatric Oncology Management Team has been at the forefront of using a multi-disciplinary approach to treat cancer. With the highest patient satisfaction scores at Stony Brook, it is a model for other departments. Since the program began in 1991, the team has treated more than 500 children with malignant tumors. In 2010, the team had 2,000 inpatient visits and 3,600 outpatient visits. Approximately 50 percent of the children in Suffolk County with childhood tumors were treated at Stony Brook. Stony Brook's disease-specific cure rates remain at or above the national benchmarks for major childhood cancers such as acute leukemia, brain tumors, lymphoma, and bone and soft tissue sarcomas. The program continues to actively accrue patients to clinical trials sponsored by the Children's Oncology Group and other research consortia.



Laura Hogan, MD, and a pediatric patient

### HIGHLIGHTS

**Program Expansion.** Through a generous grant from the Berkowitz Family Foundation, the highly successful and nationally recognized School Re-Entry Program has expanded to provide education support and advocacy for children with chronic hematologic disorders. This is in addition to the support and services it already offers to children with cancer.

**Professional Affiliations.** All of the team's pediatric surgeons, radiation oncologists and pediatric oncologists are certified in their specialty and are members of the prestigious Children's Oncology Group. Each of the program's nurse practitioners is chemotherapy-certified by the Association of Pediatric Hematology/Oncology Nurses (APHON, CPON certified).

**Nationally Recognized Program.** Devina Prakash, MD, leads a multidisciplinary team that developed a program to reduce the incidence of central-line infection in oncology patients. Their efforts reduced rates by more than 80 percent with an overall incidence better than the nationally recognized "best practice" guidelines.

**Research.** Laboratory research investigating the mechanism of tumorigenesis for neuroblastomas and brain tumors continues. With the recruitment of Laura Hogan, MD, research has expanded to include exploring the biology of relapsed

acute lymphoblastic leukemia. Studies focusing on bone mineral loss during therapy continue. Stony Brook researchers identified loss of bone mineral content as a consequence of chemotherapy in the majority of children treated for cancer, irrespective of their underlying disease and chemotherapy regimen. In collaboration with faculty in the Department of Biomedical Engineering, a new study is exploring the effect of low-frequency vibration on bone remineralization.

**Support Services.** Team support services include the parent support group, Our Little Heroes, and specialized sibling and bereavement programs, which are open to Suffolk County families regardless of where treatment is received. With an increase in the number of patients who are teenagers and young adults, Stony Brook has initiated a new teen support group facilitated by Darla Broberg, PhD.

**Laboratory Certification.** The Cytogenetics Laboratory is certified by the Children's Oncology Group for the analysis of chromosomal abnormalities in childhood leukemia. The lab provides state-of-the-art molecular genetic and chromosomal studies to Stony Brook physicians to assist in disease diagnosis and identification of appropriate treatments.

**Quality of Life Initiatives.** The comfort and quality of life of Stony Brook's patients remain priorities. Resources that

maximize the on-therapy and off-therapy quality of life for patients include:

- **Camp Adventure** is a sleepover camp sponsored by the American Cancer Society for children with cancer and their siblings. Typically, 30 to 40 percent of children attending annually come from Stony Brook, and several of the camp counselors are "graduates" of the Stony Brook program. Staff members, including RNs and NPs, volunteer to help ensure that children receive their medications during camp week. Division Chief Robert Parker, MD, is the consulting oncologist for the camp and a regular on-site volunteer.
- **The Sunrise Day Camp**, sponsored and actively supported by the Pediatric Hematology/Oncology program, is dedicated to children with cancer and chronic blood disorders. Staff from Stony Brook facilitate patients' participation and ongoing treatment during camp times.
- **Daniel Brooks Memorial Education Award** is a Stony Brook Pediatric Oncology Program, which continues to support post-high school education for all "graduates" of the cancer program. Last year, more than \$20,000 was awarded to these students to help defray the cost of college and technical school education.
- **PlayFit-StayFit**, developed by faculty of the Stony Brook School of Health Technology and Management's Physical Therapy Program, helps children regain physical abilities with the goals of reclaiming their pre-cancer levels of physical ability and activity, and to maintain a healthy lifestyle as an adult.
- **The Late Effects/Long-Term Follow-Up Program** is being developed for survivors of childhood cancer who encounter both medical and social difficulties later in life. Designed under the direction of Dr. Hogan, the goal is to recognize those needs early and intervene to minimize their impact in adulthood. It will employ national standards for follow-up of childhood cancer survivors.

## Sarcoma Management Team



Claire Smith, RN, and Colette Pameijer, MD, discussing treatment options with a patient as Philip Bao, MD, looks on

### OVERVIEW

Soft tissue tumors encompass a wide variety of tumors that arise most commonly from fat, muscle, bone or connective tissue anywhere in the body. However, they occur most commonly in the extremities, with 15 percent arising in the retroperitoneum. Overall, sarcomas are uncommon, accounting for only 1.5 percent of cancer cases in the U.S. each year. This translates into approximately 8,600 cases annually. This also means that access to advanced expertise can be limited. The fact that Stony Brook has a sarcoma management team is an important service to the Suffolk County community.

### Team Members

**Surgical Oncology:** Colette Pameijer, MD, Team Leader; Philip Bao, MD; Kevin Watkins, MD; Claire Smith, RN, Nurse Navigator  
**Pathology:** Sonya Hwang, MD  
**Radiology:** Elaine Gould, MD; Mingqian Huang, MD  
**Radiation Oncology:** Bong Kim, MD  
**Orthopedic Oncology:** Fazel Khan, MD  
**Medical Hematology/Oncology:** Andrzej Kudelka, MD

### HIGHLIGHTS

The Sarcoma Management Team is dedicated to the comprehensive management of patients with soft tissue tumors. This includes initial diagnosis, staging, treatment and follow-up care. When patients are referred to the team, their cases are discussed at a multidisciplinary conference, after which a treatment plan is developed in accordance with National Comprehensive Cancer Network guidelines. Most patients can be treated with limb-sparing or minimally invasive techniques. Other specialists such as plastic or orthopedic surgeons — all of whom are available at Stony Brook — may collaborate to achieve excellent functional outcomes.

### Emergency Department Program.

Patients with sarcoma often experience long delays from the onset of symptoms to diagnosis. When patients with symptoms of soft tissue masses and possible sarcoma are seen at Stony Brook's Emergency Department, Sarcoma Management Team members are notified and immediate plans are made for further evaluation, including imaging and follow-up at the Cancer Center.

## Upper Gastrointestinal Oncology Management Team

### OVERVIEW

The Upper Gastrointestinal Oncology 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 providing 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, and surgical nurse specialists and ancillary support staff who help ensure that patients achieve the maximum benefit from their therapies. The goal is complete care expedited in a compassionate manner.



Patty Zirpoli, RN, and Kevin Watkins, MD, with a patient

### 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. A critical step in the management of upper GI cancers is accurate staging, which allows the team to establish the correct treatment plan for

each individual. This may be done via endoscopic ultrasonography, computerized tomography (CT) scan and/or positron emission tomography (PET) scanning.

**Surgery.** Surgery for tumors in this area of the body is extremely complex, with high morbidity and mortality rates. The Upper Gastroenterology Oncology Team works to pioneer surgical techniques to help minimize these for patients. This allows patients an improved quality of life as well as the ability to move forward with other treatment modalities such as chemotherapy and radiation.

**Minimally Invasive Techniques for Pancreatic Cancer.** Minimally invasive pancreatic surgery uses state-of-the-art equipment, including robotics, to minimize the stress to the patient and improve outcomes. Minimally invasive pancreaticoduodenectomy is the pinnacle of achievement in this form of surgery. The Stony Brook team is one of fewer than a dozen high-volume centers for this procedure in the U.S. The team has presented its groundbreaking

techniques at both national and international conferences. The team also employs these techniques to treat other tumor sites including the liver, esophagus and stomach.

**Breakthroughs for Liver Cancer.** The team offers a multimodality approach to treat either primary tumors of the liver or other tumors that have spread to the liver. For metastatic colorectal cancer to the liver, surgery is the mainstay of treatment but is not always technically feasible. Other regional techniques include local tumor ablation with thermal modalities such as radiofrequency ablation and non-thermal ablation with irreversible electroporation. Ablation is a technique used to kill tumors without removing them. This procedure can be performed with standard surgical techniques, laparoscopic approaches or image-guided techniques with CT scan or ultrasound. Other significant improvements include the use of embolic treatments where substances are injected into the arteries feeding the liver tumors. These substances include beads that give off chemotherapeutic agents and substances tagged with

radioactive agents (Yttrium-90 therapy). These therapies can improve control of tumors in the liver without the side effects associated with typical systemic chemotherapy.

**An International Leader.** In 2009, the team was the first in the world to treat unresectable pancreatic cancer with a local ablation modality called irreversible electroporation (IRE). The procedure uses the NanoKnife®, a computerized system that opens microscopic pores in the targeted area through brief and controlled electrical pulses. These pores remain open permanently, causing microscopic damage that kills the cells. The body then rids itself of these dead cells. The team continues to be a leader in this form of treatment and receives referrals from across the country and around the world. Stony Brook will be one of the major sites in the U.S. for the proposed national trial to study its effectiveness. Stony Brook physician researchers are also working to improve understanding of this treatment for cancer with basic science investigations.

**Palliative Care.** If the disease cannot be eradicated, the team, working with the Stony Brook's Survivorship and Supportive Care Program, strives to palliate the patient's symptoms and improve quality of life. Significant strides have been made in palliative care for patients with pancreatic cancer, including new bile duct stents that prevent tumor ingrowth and further duct blockage by staying open for longer periods of time — thus relieving jaundice and improving symptoms. Researchers also are examining drug-eluting stents; the use of endoscopic ultrasound-guided fine-needle injection; radiation beads; and chemotherapeutic agents such as Taxtol®. In addition, the team tracks the quality of life of cancer survivors to help determine whether the approach should be updated.

## Pancreatic Cancer Site Survey

Potentially curative surgical resection and minimally invasive pancreatic surgery may be performed when imaging tests suggest a localized early-stage tumor.

**The pancreas is a long gland that lies transversely across the posterior abdomen and extends from the duodenum to the splenic hilum.** It is divided into the head, with an uncinata process, a neck, a body and a tail.

In the United States, cancer of the pancreas is the second most common malignant gastrointestinal tumor and the fourth leading cause of cancer-related deaths in adults.

The National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program estimates that 21,370 men and 21,770 women will have been diagnosed, and 36,800 men and women will have died of cancer of the pancreas in 2010, with a lifetime risk of developing pancreatic cancer at 1.41 percent and an overall survival rate for 2001-2007 at 5.5 percent. Pancreatic cancer is difficult to diagnose especially in its early stages. The median age at diagnosis based on data from 17 SEER geographic locations in 2004-2008 was 72 years.

Most cancers of the exocrine pancreas are epithelial tumors (adenocarcinoma or infiltrating duct carcinoma) that arise in the pancreatic head and result in clinically evident jaundice. Tumors that arise in the body or tail are insidious and often far advanced when detected. The body of the pancreas is in direct contact with the stomach wall, the inferior

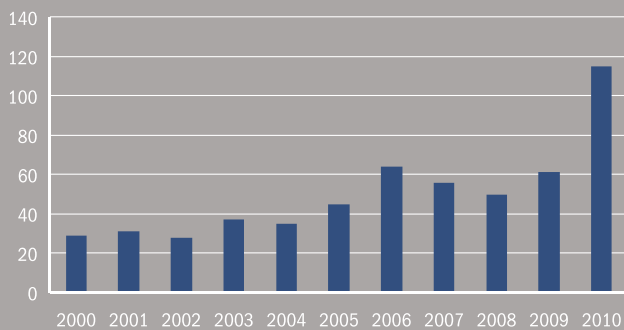
vena cava, superior mesenteric vein, splenic vein and left kidney, putting these sites at risk for invasion by direct extension of the primary pancreatic tumor. The most common sites of distant or discontinuous spread on presentation are the liver, peritoneal cavity and lungs. Endoscopic ultrasound and computed tomography scanning are used in diagnosis and clinical staging. Treatment is mostly based on the stage at diagnosis. Staging depends on the size and extent of spread of the primary tumor. Potentially curative surgical resection, such as the pancreatoduodenectomy or Whipple procedure, and minimally invasive pancreatic surgery may be performed when imaging tests suggest a localized early stage tumor. Palliative surgery is used to relieve symptoms or prevent complications such as biliary obstruction for tumors. Ablative techniques, such as radiofrequency ablation, are used to treat metastases and improve symptoms. A newly developed local ablation modality, irreversible electroporation (IRE), may be used to treat unresectable pancreatic cancers. Multimodality therapy with systemic agents, such as 5FU and gemcitabine chemotherapy, and radiation therapy may improve survival. A pancreatic cancer site survey at Stony Brook Cancer Center compares age, gender, race, histology, stage, insurance type treatment and observed survival with findings in the National Cancer Data Base.

### Pancreatic Cancer Site Survey References

- American Cancer Society. (2010). *Cancer facts and figures*. Retrieved May 11, 2011, from [www.cancer.org/Cancer/PancreaticCancer/DetailedGuide/pancreatic-cancer-key-statistics](http://www.cancer.org/Cancer/PancreaticCancer/DetailedGuide/pancreatic-cancer-key-statistics)
- American Joint Committee on Cancer. (2010). *Cancer staging manual* (7th ed.). Chicago, IL: Springer
- American College of Surgeons Commission on Cancer. (2010, September 15). National cancer data base survival reports. Retrieved May 11, 2011, from [www.facs.org/cancer/ncdb/survivalreportuser.pdf](http://www.facs.org/cancer/ncdb/survivalreportuser.pdf)
- National Cancer Institute. (n.d.). *Pancreas section, surveillance epidemiology and end results (SEER)*. Retrieved May 11, 2011, from [www.seer.cancer.gov/statfacts/html/pancreas.html](http://www.seer.cancer.gov/statfacts/html/pancreas.html)

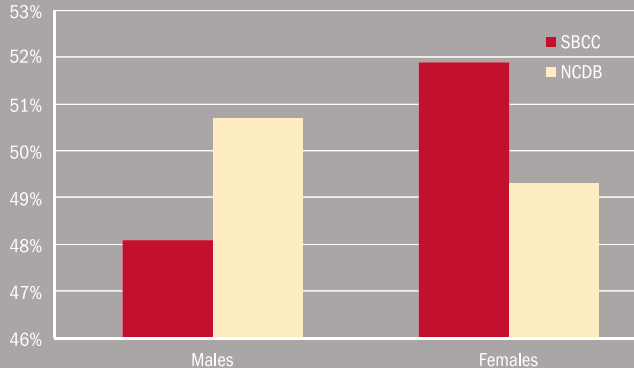
### Pancreatic Cancer: Patient Incidence

Stony Brook Cancer Center (SBCC) 2000-2010  
Patients first seen at SBCC for new diagnosis or re-evaluation



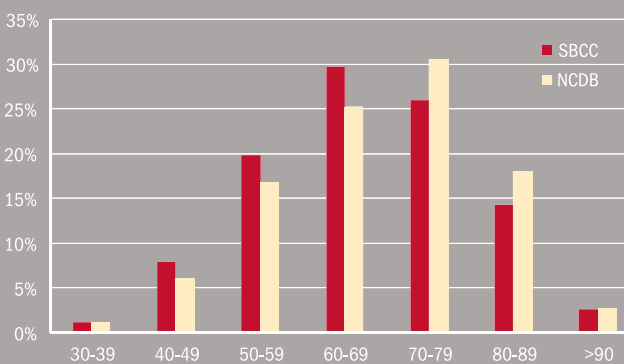
### Pancreatic Cancer: Incidence by Gender

Stony Brook Cancer Center (SBCC) 395 patients in 2000-2010 vs. National Cancer Data Base (NCDB) 213,739 patients at 1,392 hospitals in 2000-2008



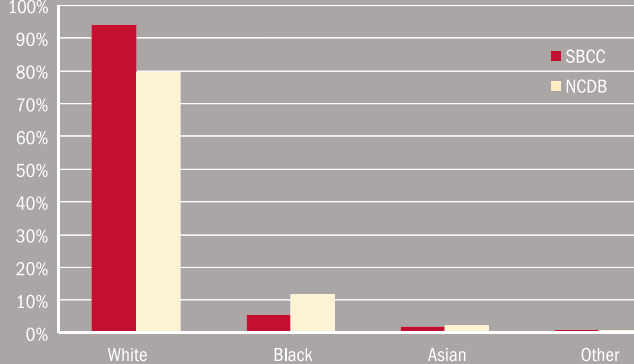
### Pancreatic Cancer: Age at Diagnosis

Stony Brook Cancer Center (SBCC) 395 patients in 2000-2010 vs. National Cancer Data Base (NCDB) data from 1,392 hospitals in 2000-2008



### Pancreatic Cancer: Incidence by Race

Stony Brook Cancer Center (SBCC) 395 patients in 2000-2010 vs. National Cancer Data Base (NCDB) data from 1,392 hospitals in 2000-2008



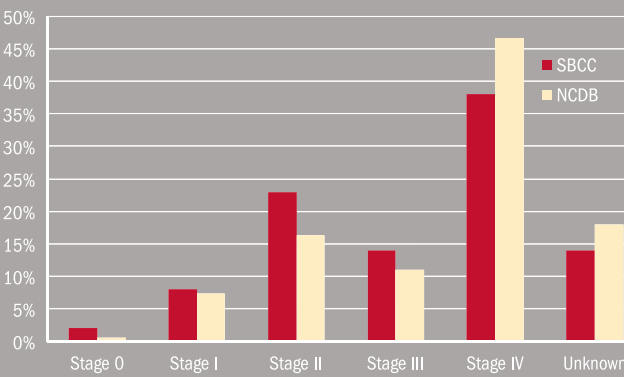
### Pancreatic Cancer: Patient Insurance

Stony Brook Cancer Center (SBCC) 395 patients in 2000-2010 vs. National Cancer Data Base (NCDB) data from 1,392 hospitals in 2000-2008

	Not Insured	Private Insurance	Managed Care	Medicaid	Medicare	Medicare with Supplement	Veteran or Military
SBCC	6.2%	2.19%	34.67%	5.11%	9.85%	41.24%	0%
NCDB	2.9%	9.62%	22.26%	3.93%	17.49%	37.92%	1.69%

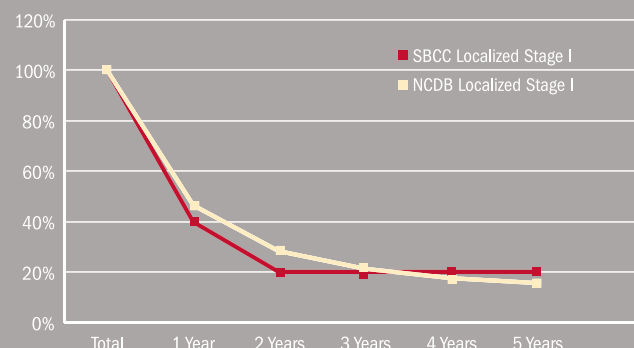
### Pancreatic Cancer: Stage at Diagnosis

Stony Brook Cancer Center (SBCC) 395 patients in 2000-2010 vs. National Cancer Data Base (NCDB) data from 1,392 hospitals in 2000-2008



### Pancreatic Cancer Stage I: Five-Year Observed Survival

Stony Brook Cancer Center (SBCC) 10 cases from 2003-2006 vs. National Cancer Data Base (NCDB) 1,267 cases in 2003 at 1,269 programs nationwide



### Pancreatic Cancer: Treatment Modalities

Stony Brook Cancer Center (SBCC) 395 patients in 2000-2010 vs. National Cancer Data Base (NCDB) data from 1,392 hospitals in 2000-2008

	Surgery Only	Surgery and Chemotherapy	Surgery, Radiation and Chemotherapy	Chemotherapy Only	Chemotherapy and Radiation	None
SBCC	11%	8%	4%	24%	13%	19%
NCDB	9%	3%	6%	24%	10%	43%

## 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 2007, Stony Brook University 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 500 robot-assisted surgeries to date. He continues to investigate new techniques and instrumentation. Community education also is an important focus of the team. In 2010, the outreach team provided 1,067 men free prostate screenings at 24 locations across Long Island.

### 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; chemotherapy for high-risk and advanced prostate cancer; immunotherapy for metastatic disease; and investigational therapies.

#### Team Members

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

#### Leading-Edge Treatment for Bladder Cancer.

Bladder cancer treatments include local surgical resection, bladder preservation using chemotherapy and radiation, and placement of chemotherapeutic agents into the bladder. Some patients may be candidates for creation of a new continent bladder made from the intestine that allows full restitution of urinary function. Robot-assisted surgery also may be an option for appropriate candidates who require removal of the bladder. During diagnostic cystoscopic surgeries, the team uses leading-edge optical coherence tomography technology to help diagnose and stage bladder cancers earlier.

#### New Approaches to Kidney Cancer.

For adults, open and laparoscopic radical nephrectomy and partial nephrectomy are available. Those with advanced disease can receive immunotherapy with cytokines, such as interleukin-2, and other agents. Also available are oral agents such as sunitinib, sorafenib, pazopanib and everolimus, that target vascular endothelial growth factor receptors. 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. This study is supported by a research award.



Wayne Waltzer, MD, and Melanie Dale, RN, with patient

- 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 its role 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 with Arthur Grollman, MD, 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). Dr. Romanov also is involved in NIEHS PPG research 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, and have identified quantitative trait loci conferring sensitivity to the toxin. This advance has enabled the demarcation of human genes responsible for AAN.
- Shenhong Wu, MD, PhD, is investigating the optimal and safe use of new agents, including bevacizumab, sorafenib and sunitinib in kidney cancer, prostate cancer and other cancers. His studies have been published in national journals, such as the *Journal of the American Medical Association* and *The Lancet Oncology*, and have been reported at major medical conferences.

## Essential to the Team

Advancing the Standard of Care Through Specialization, Leading-Edge Techniques and State-of-the-Art Technology

### Surgery

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

#### OVERVIEW

Surgeons in the Department of Surgery offer the highest level of specialization and expertise. Recognizing the relationship between volumes and outcomes, each surgeon focuses on a specific area of cancer, which has led to a department composed of highly specialized subspecialists. Surgeons work closely with Medical Hematology/Oncology and Radiation Oncology to provide multimodality approaches to cancer — often collaborating to design and implement new protocols for treatment.

#### Implementation

The Department has been at the forefront of using minimally invasive surgical techniques, including laparoscopy and robot-assisted surgery. It also has expertise in advanced diagnostic techniques, such as sentinel node biopsy for staging breast cancer and malignant melanoma. Surgeons serve as members and leaders of the Disease Management Teams and Tumor Board conferences. They are partners in more than 50 protocols approved by Stony Brook's Institutional Review Board, including the American College of Surgeons Oncology Group, National Surgical Adjuvant Breast and Bowel Project, Cancer and Leukemia Group B and National Institutes of Health-funded research on consent for tumor bank tissues. Surgeons are the primary collaborators with pathologists in Stony Brook's Tumor Tissue Bank, a valuable resource that will help facilitate future cancer biomarker discovery, increase diagnostic accuracy, improve the ability to predict clinical outcomes and develop treatments that can be tailored for individual patients.

#### New Initiatives

**A National Program of Leading-Edge Surgery.** The Upper Gastrointestinal and General Oncologic Surgery Group, which performed the world's first-ever pancreatic procedure using a new surgical technique called irreversible electroporation (IRE), continues to expand its program in this novel approach to tumor ablations. Patients from as far as California are now coming to Stony Brook for this “cellular surgery.” IRE selectively kills tumor cells, and from the local disease standpoint has met all expectations as ablative therapy for pancreatic cancer, a typically fast-growing and fatal cancer. Plans to develop national trials are being made to demonstrate the effectiveness of IRE for this cancer.

**Robot-Assisted Surgery Milestones.** Stony Brook's otolaryngology and head and neck surgeons made history as the first on Long Island to utilize robotics to perform surgery on patients with ear, nose and throat cancers. This year, they began using the da Vinci® S HD™ Surgical System. This advanced technology enables them to operate with a better visualization of tissues and improved precision in a minimally invasive manner. After robot-assisted surgery, patients generally experience significantly less pain, blood loss and scarring as well as shorter recovery times compared to conventional surgery.

**Expanded High-Risk Screening Program.** Breast surgeons at the Carol M. Baldwin Breast Care Center expanded surveillance for women at increased risk of developing breast cancer. This comprehensive screening program offers genetic counseling and screenings with advanced technologies.

**Reconstructive Surgery Advances.** The program provides the most sophisticated care available. Recently, the Department

appointed a new director committed to using the latest surgical advances and conducting leading-edge research. In addition, the Carol M. Baldwin Foundation for Breast Cancer Research awarded the Department a grant to evaluate minimally invasive imaging techniques that measure blood flow in skin during reconstructive breast surgery following mastectomy. Knowledge gained will help to minimize complications with breast reconstruction, enabling more patients to be candidates for immediate reconstruction.

**Laparoscopic-Assisted Resection.** The Department's colorectal surgeons are participating in a phase III prospective randomized trial comparing laparoscopic-assisted resection versus open resection for rectal cancer.

**Simulated Laparoscopic Sigmoidectomy.** Colorectal surgeons published a study evaluating the responsiveness of surgery residents to simulated laparoscopic sigmoidectomy training. Residents underwent training for previously tattooed sigmoid cancer using disposable abdominal trays in a hybrid simulator to perform a seven-step standardized technique. Results showed a significant decrease in operating time and anastomotic leak rate. Training is now integrated into Stony Brook's surgical residency program.

**Novel Approaches.** Colorectal surgeons have performed a number of TAMIS (transanal minimally invasive surgery) procedures, which facilitate the resection of large rectal tumors in select patients who would otherwise require a radical operation. Surgeons in the Division of Otolaryngology-Head and Neck Surgery also now offer patients expertise in endoscopic, minimally invasive skull base surgery and pediatric head and neck surgery.

### Hematology and Oncology

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

#### OVERVIEW

The Division of Hematology and Oncology provides a comprehensive program in cancer treatment and research. Its clinicians evaluate and treat 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 Division includes nurse practitioners, chemotherapy-certified oncology nurses, an oncology-trained nurse navigator and research nurses. Specialists participate in disease-site management team meetings and Tumor Board conferences to enhance the multidisciplinary approach to treatment planning, as well as follow-up care for patients. The Division's medical hematologists are specialists in the diagnosis and treatment of leukemias, lymphomas, myelomas and other hematologic malignancies. The Medical Oncology inpatient units maintain 45 beds, 15 of which are dedicated for bone marrow and stem cell transplantation. The outpatient medical oncology cancer clinic provides chemotherapy and expert oncology nursing for approximately 12,000 patient visits annually, and offers support services from dedicated nutritionists, social workers and nurse navigators.

#### Implementation

The Division oversees specialty programs, including the Bone Marrow and Stem Cell Transplantation Program. With a specialized unit that maintains state-of-the-art infection control, the program offers autologous and allogeneic bone marrow and stem cell transplantation for leukemia, lymphoma and multiple myeloma. Patient management is based on nationally recognized guidelines for care. Clinical trials are open for major cancer sites and include treatment for prostate, breast and colon cancers; glioblastoma multiforme; and aggressive malignant astrocytomas. Research includes new studies and collaboration with national research groups and pharmaceutical companies.

### Nursing



Laura Vogeli, RN, and Coreen Bandalos, RN

**Program Leaders:** Lee Anne Xippolitos, RN, PhD, Chief Nursing Officer; Rose C. Cardin, RN, MSN, Associate Director of Nursing and Cancer Services; Jeannie Gaspard RN, ANP, OCN, NEA-BC, Assistant Director of Nursing, Outpatient Cancer Services; Kathleen Noone, RN, Assistant Director of Nursing, Inpatient Cancer Services and Department of Radiation Oncology

#### OVERVIEW

Vital members of the Disease Management Teams, specialty trained oncology nurses are committed to compassionate and seamless service during all phases of treatment, including outpatient clinics, adult and pediatric inpatient units, nurse navigator services, radiation oncology, consultation and liaison services, and clinical trials. The model of practice used is patient and family centered care, whose core elements are dignity, respect, information sharing, and collaboration and participation. Nurses conduct patient and family rounds and are consistent participants in the Oncology Partners in Care Advisory Board.

#### Implementation

This year, the Division aligned with Stony Brook Medicine's mission to become a high reliability organization. To help those who work daily with patients better manage quality and outcomes, each unit established a triad of leadership: a Nurse Manager, a Clinical Nurse Specialist and a Lead Physician Champion to work with the bedside caregivers. The team meets weekly to address quality metrics, safety events and any other processes on the unit that need attention. The unit-based team receives guidance and support from other departments in areas such as decision

support and quality management. Data is collected and reported on a unit-based dashboard and reviewed with staff and senior leadership. The new processes have yielded improved quality outcomes in all essential areas. For the 2010-2011 fiscal year, inpatient units have experienced no unit-acquired pressure ulcers. They are below the national average for patient falls. Radiation Oncology has reduced patient wait time for treatment. Medical and Pediatric Oncology have achieved near-perfect compliance with the care of venous access devices on all outpatients requiring them. And the Breast Care Center has achieved 100 percent compliance in the use of the “Fast 5 Program,” a screening program to help ensure that all patients with breast cancer are seen by a surgeon within a short timeframe.

Patient satisfaction is the Division's highest priority. Outpatient Oncology continues to look for ways to improve the patient experience and exceed expectations. Oncology leadership is proactive in applying the advice from the Cancer Advisory Board, and relies upon regular Advisory Board meetings to remain connected to the community and meet the growing demands of the patients.

## Radiation Oncology

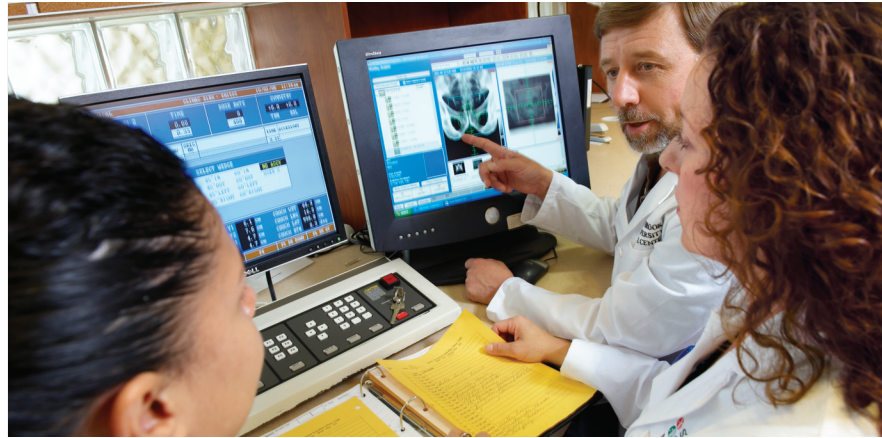
**Program Leader:** Allen G. Meek, MD, Chair and Clinical Director, Radiation Oncology

### OVERVIEW

Stony Brook's Department of Radiation Oncology works with staff from the University Hospital, the School of Medicine and the Research Foundation of the State University 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. Its innovative approaches to treatment and ongoing acquisition of advanced technology have made it a regional resource. Members play a key role as part of the Disease Management Teams. The Department is composed of five physicians, three physicists, three medical dosimetrists, 13 radiation therapists, five nurses and nursing assistants, two administrators and 13 clerical/secretarial staff. In 2010, the Department saw 1,045 consults and delivered 16,548 external beam radiotherapy treatments. It performed 307 low- and high-dose rate brachytherapy procedures (Pd103, I-125, Sm 153, SR90, HDR, T&O, vaginal cylinder, MammoSite®), 146 radioiodine ablations for thyroid cancer, 34 radiosurgery procedures and 49 stereotactic body radiotherapy treatments.

### Implementation

The full spectrum of radiotherapy procedures is available, including external beam radiotherapy from three linear accelerators (delivered via either three-dimensional conformal or intensity-modulated beams); low- and high-dose rate brachytherapy (delivered by intracavity, oral, intravenous or surface methods); total body radiotherapy in preparation for bone marrow transplantation; stereotactic radiosurgery; and image-guided fractionated stereotactic radiotherapy using either a linear accelerator with a special BrainLAB micro-multileaf collimator and ExacTrac® motion detection system or an accelerator with RapidArc® and cone-beam computed tomography (CT) imaging capability. Other treatments include radioimmunoglobulin administration and the MammoSite® radiation system for partial breast radiotherapy.



Radiation therapists Marlene Asencio, Nina Mestres and Charles Szarka viewing images during a treatment session

**Equipment Upgrades.** Major upgrades this year were to the Department's ARIA® electronic medical record and Eclipse™ treatment planning system. These upgrades not only improve the performance of these vital software systems but also are a critical step in transitioning to a paperless department and establishing meaningful use of an electronic health record. The upgrade of the linear accelerator last year, adding the RapidArc delivery system with on-board imaging capability (OBI), continues to perform well. RapidArc radiotherapy technology is a major advance that improves radiation dose conformity while significantly shortening treatment times. It delivers treatments two to eight times faster than conventionally delivered dynamic treatments and with increased precision — a combination that enables physicians to improve care and treat more patients.

The OBI upgrade from Varian Medical Systems® offers image-guided radiation therapy (IGRT), which allows clinicians to use advanced imaging techniques to verify patient position and tumor position at the time of treatment. Knowing the exact location of the tumor helps clinicians reduce the volume of tissue irradiated, targeting only the tumor and sparing the surrounding normal tissue. Irradiating less normal tissue reduces the toxicity of radiotherapy which, in turn, improves the patient's quality of life. In some cases,

improved targeting may make it possible to deliver higher radiation doses to the tumor and thereby increase the likelihood of local tumor control.

### Residency and Training Programs.

The Department, in conjunction with the Department of Radiology, has a two-year residency program in medical physics. Residency training is now a requirement for licensing as a medical physicist. In collaboration with Stony Brook School of Health Technology and Management, the Department also trains medical dosimetrists, qualifying them for certification.

**Research Initiatives.** The Department is part of the national Radiation Therapy Oncology Group. Current research topics include cooperative group clinical trials, development of software and hardware to advance radiation treatment techniques, and, in conjunction with Brookhaven National Laboratory, investigating clinical applications of heavy ion radiation beams.

**Accreditations.** The Department of Radiation Oncology received a three-year accreditation from the American College of Radiology (ACR) and the American Society for Radiation Oncology (ASTRO). A national distinction, the ACR-ASTRO seal of accreditation represents the highest level of quality and patient safety. The accreditation is in effect through March 2014.

## Diagnostic Radiology

**Program Leaders:** John Ferretti, MD, Interim Chair, Diagnostic Radiology; William Moore, MD, Radiology Medical Director

### OVERVIEW

Diagnostic imaging plays a critical role in cancer diagnosis, treatment planning and cancer monitoring as well as palliative therapies through interventional techniques. The Department of Radiology offers state-of-the-art clinical care and recently has expanded to enhance its services in the areas of thoracic disease, breast imaging, virtual colonoscopy, cardiovascular imaging and body magnetic resonance imaging (MRI). Attending radiologists and scientists are actively involved in cancer research in humans through new imaging modalities and techniques including virtual cystoscopy for bladder tumor detection via MRI and improved detection of early breast cancer via breast tomosynthesis. Preclinical research in the areas of positron emission tomography (PET) imaging and nanoparticle techniques are also currently under investigation. The Department continues to lower radiation and contrast doses for patients without sacrificing the quality of the image. Radiologists attend multidisciplinary Tumor Board meetings, where they provide consultation and review images during case presentations.

### Implementation

**Expanded Capabilities.** During the past year, the Department of Radiology expanded services, imaging more than 10,000 patients with a primary diagnosis of cancer. Patients presenting with breast cancer were the largest group, representing about 23 percent of the total patients with cancer imaged, followed by colorectal at 21 percent and lymphomas at 16 percent. The other two major areas of cancer imaging were head and neck cancers at 16 percent and lung cancer at 16 percent.

**State-of-the-Art Technology.** With the installation of a 320-slice CT scanner, the Department is leading the way in state-of-the-art technology for cardiovascular imaging, perfusion imaging and true volume scanning — all of which greatly

enhance Stony Brook Medicine's cancer imaging program. Along with Brookhaven National Laboratory, the Department is expanding its PET imaging capabilities both in clinical practice and in research. The Department is in the planning stages for adding a cyclotron to create new radionuclides for PET imaging, to be located on Stony Brook's east campus. In addition, Radiology is currently in the planning stages for the installation of a single-photon emission computed tomography (SPECT/CT) camera, another Nuclear Medicine adjunct to the PET/CT scanner for cancer diagnosis, tumor localization, staging of cancers and their response to treatment.

The Department has MRI scanners of 1.5 Tesla and 3.0 Tesla strengths and a high-field open MRI scanner (which will be operational in December 2011) that will provide patients with the best image quality for diagnosing and staging cancers. It also has new recently upgraded state-of-the-art ultrasound equipment that can perform the latest imaging, including tissue harmonics, which offers advanced imaging without ionizing radiation exposure.

Recent upgrades in the advanced Picture Archiving and Communications System (PACS) provide the ability to track the progress of various cancer treatments over time. This system also allows electronic communication between Stony Brook and its referring physicians as well as neighboring hospitals.

**Interventional Treatment.** The Department offers a complete array of treatment options for patients with cancer. Some of these advanced treatment options include cryoablation, radiofrequency (RF) ablation and chemoablation. These treatment options can be offered to patients for definitive treatment of cancer or as part of their palliative care. The radiologists work collaboratively with surgeons, internists and oncologists in order to determine the best possible treatment options for patients with cancer.

## Pathology

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

### OVERVIEW

The Department of Pathology provides comprehensive reports on cancer specimens that include diagnoses, prognostic information and biomarker profiles to guide targeted therapy. Specialty tests, including cytogenetic services and molecular tests, support cancer management. The Department performs clinical research and maintains a Tissue Bank. Faculty specializing in breast, gynecologic, digestive, thyroid, genitourinary and lung cancers, and melanoma, sarcoma, leukemia and lymphoma are essential members of Disease Management Teams and support more than a dozen Tumor Boards that are scheduled each week.

### Implementation

**Departmental Advances.** A highlight includes adopting the use of voice recognition technology resulting in gains in turnaround times for surgical pathology reports. The Department has received accreditations from the Accreditation Council for Graduate Medical Education for fellowships in Selective Pathology and Hematopathology.

**New Technology.** The Department added a telecytology service for immediate evaluation of radiology-guided fine needle aspiration services. A two-dimensional barcoding system is used in Surgical Pathology in order to maintain positive patient ID through all steps of specimen processing and to enhance patient safety.

**Research.** Programs include investigation of molecular events associated with tumor-cell invasion and metastasis, analysis of molecular mechanisms that regulate cell division, and discovery and validation of novel cancer biomarkers. Department members are engaged in regenerative medicine research that will lead to the development of new therapeutic approaches for the treatment of metabolic diseases, cardiovascular disease, hematologic malignancies and other medical disorders.

# Clinical Support

Key Services Available Before, During and After Treatment

## Pain Management

**Program Leaders:** Peter Glass, MB, ChB, FFA (SA), Chair, Department of Anesthesiology; Brian Durkin, DO, Director, Center for Pain Management; Christopher Page, MD, Director, Acute Pain Service; Irina Lokshina, MD; Farrokh Maneksha, MD; Marco Palmieri, DO; Patricia Tsui, PhD; Margaret Fischer, NP; Stacey Hildebrand, NP; Diane Santangelo, NP; 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

Uncontrolled pain is the most feared complication in cancer patients. Inpatients who are seen by the consultative pain management service are evaluated for medical and interventional pain management therapies, as well as for other types of supportive care, when appropriate. Often patient-controlled analgesia pumps (PCAs) and adjuvant analgesics bring rapid improvement in pain control. But for patients who continue to have intractable pain or side effects, the team will consider a variety of regional anesthesia techniques. For example, central medication delivery by either epidural or spinal administration or peripheral nerve block/neurolysis allow for more focused analgesia, which often improves pain control while avoiding the side effects of systemic medications.

Outpatients with chronic pain are evaluated and treated at the Center for Pain Management located in the Cancer Center. Staffed by anesthesiologists, nurse practitioners and a psychologist with expertise in pain management, the Center for Pain Management treats acute, chronic, benign and cancer-related pain. Modalities include 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. The goal of the Center is to remove the fear of intractable pain from patients with cancer.

## Nutrition Services

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

### OVERVIEW

Nutrition can play a powerful role in cancer prevention, as well as support the patient's health during treatment and help prevent recurrence. In addition, according to the National Cancer Institute, about one-third of all cancer deaths are associated with malnutrition. Therefore, it is important for patients with cancer to have a constant supply of nutrients to fuel the healing. It is also a positive way for patients to take control of their lives and well being. Benefits of optimal nutrition for people living with cancer include:

- Supporting immune function
- Preserving lean body cell mass

- Rebuilding body tissue
- Decreasing the risk of infection
- Improving strength and increasing energy
- Helping to speed recuperation after treatment
- Improving quality of life

### Implementation

After assessing the patient, a Stony Brook dietitian provides the patient and/or caregiver with individualized written information and verbal counseling, focusing on foods that help ensure optimal nutrition but are also enjoyable. Using a personalized nutrition plan, the dietitian focuses on managing side effects of cancer treatment, finding foods the patient's body can tolerate and recommending supplements to improve the use of calories. The registered dietitian is a member of the patient's care team and supports them through the entire continuum of care. This team approach allows patients to receive the appropriate attention at the appropriate time and place. The dietitian also consults regularly with the oncologists and other departments. Follow-up care and referral to community resources are part of the service. Nutrition Services also provides community education and support, with a focus on cancer prevention and survivorship.

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. Patients receive continual monitoring so that eating plans can be modified appropriately.

## Physical Rehabilitation

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

### OVERVIEW

Physical and Occupational Therapy provides inpatient and outpatient physical rehabilitation for adult and pediatric oncology patients. Its primary goal is to improve a patient's functional capabilities. Therapeutic interventions are tailored to meet individual needs. The Department provides community and patient education for topics such as exercise, yoga and lymphedema awareness. It also participates in research, with an emphasis on lymphedema.

### Implementation

A comprehensive assessment by a physical therapist and an individualized treatment plan incorporates the goals of the patient and family. Close communication with the referring physician(s) over the course of care is maintained. Physical therapists work with patients in all areas of the University Hospital, including Pediatric Oncology, Surgical Oncology, Medical Oncology and the Bone Marrow Transplant Unit.

### Specialized programs include:

- Post-operative inpatient assessment and patient education for activity implementation and lymphedema awareness, as appropriate.
- Outpatient physical and occupational therapy targeted for patient needs.
- Lymphedema Therapy Program staffed by specially trained physical therapists that uses the principles of complete decongestive therapy to reduce swelling and improve limb and overall function.
- A therapeutic outpatient yoga program, supervised by a physical therapist who is a certified yoga instructor, to help manage the side effects of treatment.
- Speech-language pathology, where specialists work with patients to evaluate and treat swallowing, feeding, speech, and language and voice impairments.

## Pharmacy

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

### OVERVIEW

The Pharmacy Department provides chemotherapy compounding and dispensing services to both adult and pediatric patients, on both an inpatient and outpatient basis. Each area has its own pharmacy, and all are certified USP 797-compliant facilities that meet the most rigorous government requirements for the preparation of sterile compounds. The Department employs state-of-the-art equipment and quality control measures that meet and exceed 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-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: efficient, reliable and safe pharmacy services.

## Survivorship and Supportive Care Program

**Program Leader:** Lynn Hallarman, MD, Palliative Care Specialist

### OVERVIEW

The Survivorship and Supportive Care program's mission is to help relieve suffering and improve the quality of life for patients with a life-threatening cancer diagnosis, whether they are receiving disease-modifying treatment, curative treatments or comfort measures. The program takes a whole-person, interdisciplinary approach to assess and treat cancer-related symptoms such as pain, fatigue, low appetite and symptoms related to chemotherapy or radiation. The program's groundbreaking work has been recognized with a 2009 Quality Palliative Care Leadership Award from the National Consensus Project.

### Implementation

Led by board-certified palliative care expert Lynn Hallarman, MD, the core team includes two full-time nurse practitioners. Team members work closely with the primary treatment team to assist with difficult symptom management, offer emotional support, and help smooth the transition to home and community. They also assist patients and families with complex medical decisions. Since first introduced in 2007, the program has helped more than 2,000 patients and families cope with the physical, emotional and spiritual symptoms of a life-threatening cancer.

# Patient Support and Advocacy

Core Services for Delivering Comprehensive Cancer Care

## Social Work Services

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

### OVERVIEW

As integral members of Stony Brook's comprehensive cancer care program, professional social workers are experts in the psychosocial care for patients with cancer and their families. They can assess patient and family needs 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, as well as home care, hospice and long-term planning. Social workers are available to both inpatients and outpatients.

### 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. In 2011, 500 patients and/or their families participated in one or more of Stony Brook's oncology support groups. This included support groups for prostate cancer; upper GI cancer; gynecologic cancer; thyroid cancer; leukemia and lymphoma; newly diagnosed breast cancer patients; the Gift for Kids group for children of patients with cancer; and a transitional care for inpatient support group. The Department also co-facilitated breast cancer community education.

## Child Life Program

**Program Leaders:** Jeralyn Sigwart RN, MS, PNP, CNS, Assistant Director of Nursing, Department of Pediatrics and Child Life Program  
**Inpatient Child Life Specialists:** Michael Attard, CCLS; Brooke Rose, MA, CCLS; Paulette Walter, MA, CCLS  
**Music Therapist:** Richard Morton, MT-BC  
**Inpatient and Outpatient Child Life Specialists:** Caitlin Boyle, MSW, CCLS, Pediatric Radiology; Lauren Sharaby, MS, CCLS, Pediatric Hematology/Oncology Services

### OVERVIEW

The Child Life Program brings the power of play to children who find themselves in what can be an unfamiliar and often frightening environment. Based on the theory that play is fundamental to a child's growth and development, Child Life promotes normal childhood routines to help reduce stress and ease fears during the medical experience.

### Implementation

Child Life Specialists support the patient during invasive or painful procedures by using guided imagery, relaxation and/or distraction techniques. They also provide

teaching and medical play to help prepare the child and family for an upcoming treatment, procedure, test or operation. The Child Life Program is available to patients in the Pediatric Hematology/Oncology Division in both the outpatient and inpatient units. Using a variety of "tools" that include three supervised playrooms filled with games, toys, and arts and crafts, Child Life Specialists work closely with the child, family and medical team to help reduce their anxiety and make their treatment as comfortable as possible. They are also active in Stony Brook's School Re-Entry Program, working with the medical team and schools to promote normalcy, sensitivity and acceptance among peers.



Lauren Sharaby, MS, CCLS, and patient

## Cancer Helpline

**Program Leader:** Teresa Beutel, Director, Healthcare Teleservices; Lori Tischler, RN, Oncology Nurse

### OVERVIEW

Staffed by specially trained oncology nurses, this confidential helpline is available to callers with questions and concerns about cancer on topics such as prevention, risk, screening, detection, second opinions, terminology and current research. The Cancer Helpline also serves as a way to encourage community members to act promptly and seek early detection and intervention. The healthcare professionals staffing the line also can 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 pm EST. Community members also can access the helpline via the Cancer Center's website [StonyBrookMedicalCenter.org/community/healthconnect](http://StonyBrookMedicalCenter.org/community/healthconnect) which allows individuals to send email questions to the oncology nurse.

## Chaplaincy Services

**Program Leaders:** Chaplain Stephen Unger, Director of Chaplaincy; Chaplain Elizabeth Meehan; Chaplain Madeline Queck

### OVERVIEW

Chaplaincy services are the clinical professional discipline specializing in the spiritual component of healthcare delivery. At Stony Brook Medicine, this 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. Because a diagnosis of 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, as well as in the lives of their families.

### Implementation

Chaplains visit patients in the University Hospital and 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.

## American Cancer Society

### COMMUNITY PARTNERSHIP

For more than 26 years, the American Cancer Society (ACS) has been a valued partner of Stony Brook Medicine, with a shared goal of improving the quality of life for patients with cancer and their families through prevention, advocacy, outreach and research. Reflecting this partnership, Jacqueline Wands, Senior Director of Patient and Family Services for Suffolk County, is a liaison representative to Stony Brook and attends the Cancer Committee meetings.

At Stony Brook, the ACS provides free programs and services to patients with cancer, and works in tandem with various departments including Radiation Oncology, Medical Hematology/Oncology, Surgical Oncology and the Breast Care Center to offer services in a timely and systematic way.

Services include transportation (Road to Recovery), beauty make-over classes (Look Good...Feel Better®) and peer-to-peer support from trained breast cancer survivors (Reach to Recovery). This past year, Spanish-speaking women undergoing treatment were able to attend *Luzca Bien...Siéntase Mejor* (Look Good...Feel Better) at the Cancer Center. In addition, the Pediatric Hematology/Oncology Division collaborates and supports ACS's weeklong Camp Adventure Program, a free sleep-away camp on Shelter Island for pediatric patients with cancer and their siblings. This year, a total of 34 children attended from Stony Brook.

In addition, the ACS has continued to expand its on-site Volunteer Patient Navigator Program, where navigators interact with patients to offer comfort, support, educational resources and the most up-to-date science-based information to patients. This past year, the ACS navigators directly provided support to 377 patients and caregivers at Stony Brook as well as provided information on site at the ACS office located at the Cancer Center.



# Community Outreach and Education

## Providing Support for Patients with Cancer

**Program Leaders:** Yvonne Spreckels, Director, Community Relations; Linda Bily, Patient Advocacy and Community Outreach Coordinator; Sabra Boughton, NP, PhD, Patient Education Coordinator; Susan McCarthy, LMSW, MS, Director of Social Work Services Groups, Radiation/Oncology Social Worker

### OVERVIEW

As a dedicated steward of community health, Stony Brook Medicine is committed to helping individuals through educational programs, support services and partnerships with community-based organizations. This has manifested in a number of ways: 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.

### Pictured to the right:

One of the on-site American Cancer Society volunteer patient navigators, **Kimberly Negron**, providing information to a patient at the Cancer Center

Physical therapist and certified yoga instructor **Joanne Cesiro** leading Fit and Fabulous, an eight-week yoga program for patients after breast cancer treatment

**Ghassan Samara, MD**, Director, Head and Neck, Thyroid Program, and **Mark Marzouk, MD**, Division of Head and Neck Surgery, at the Educational Presentation for the community on head, neck and thyroid cancers

Our pediatric cancer survivors with Golden Globe®-winning actress and entertainer **Ann Jillian**, following her inspirational presentation at the National Cancer Survivors Day® celebration at Stony Brook Cancer Center

### Implementation

From January through December 2010, the Department educated 3,215 persons on a variety of topics, including skin cancer, tobacco cessation, and lung, breast and pediatric cancers. The Department screened 862 men for prostate cancer, 88 individuals for skin cancer and 441 persons for oral cancer. Education about the dangers of tobacco use and secondhand smoke was provided to 158 individuals.

To identify health issues and address healthcare disparities among underserved communities, a key initiative is the Health Occupations Partnership for Excellence (HOPE) program, which educates secondary school students from racially and ethnically diverse districts on healthcare careers, health issues and achieving academic success.

Partnering with the Suffolk County Department of Health's Office on Minority Health, Stony Brook also provides free screenings, prevention/education and health insurance assistance programs.

A multidisciplinary committee meets regularly to address the cultural diversity needs of our patients. Patients' cultural, religious, spiritual, dietary, pain management and language needs are assessed as part of the nursing history and physical exam, and are included throughout the plan of care. The ASK method is used with every patient encounter:  
A = awareness of patient-specific needs  
S = sensitivity to those needs always  
K = knowledge to become culturally proficient

Each nursing unit has the cultural diversity reference book *Culture and Clinical Care* at its nursing station.



### A COLLABORATIVE APPROACH Improving the quality of life for patients with cancer through collaboration and partnership.

**American Cancer Society** provides on-site patient navigators at the Cancer Center five days a week, donates funds to Stony Brook cancer research, sponsors Look Good...Feel Better® and *Luzca Bien...Siéntase Mejor* and sponsors Camp Adventure for pediatric oncology patients.

**American Red Cross and Anthony's Best Senior Care** provides a series of lectures on nutrition, caregiving and legal issues.

**Beth C. Tortolani Foundation** sponsors the Fit and Fabulous Program, a free weekly yoga class led by a Stony Brook physical therapist for patients after breast cancer treatment.

**Firefighters Cancer Support Network** offers both a cancer peer-mentoring course and caregivers course for firefighters and their families in conjunction with Stony Brook.

**The Leukemia & Lymphoma Society** provides an on-site patient navigator at the Cancer Center two days a week.

**Livestrong® Foundation** provides Cancer Transitions, a program to help those with cancer transition from patient to survivor.

**Strength for Life** is a free exercise class for patients with cancer and staff.

**Stony Brook University Athletics** participates in the Play It Forward program, where Stony Brook student-athletes interact with and offer social support to pediatric oncology patients; and in Pink Zone, an annual Stony Brook women's basketball game that helps raise awareness of breast cancer.

**Ward Melville Heritage Organization** coordinates, in conjunction with Stony Brook's Community Relations Department, the annual Walk for Beauty event to raise breast cancer awareness and raise funds for breast cancer research at Stony Brook.

**Yoga for Life** provides a free weekly yoga class for patients with cancer and staff.

### EDUCATION AND SUPPORT PROGRAMS

#### Empowering patients through knowledge and support.

**La Herencia** is an annual education program in Spanish about nutrition, patient issues, survivorship, follow-up care and emotional needs.

**Chemotherapy Orientation** is a detailed overview of chemotherapy tips and techniques given by oncology nurses.

**Nutritional Lectures** are offered quarterly by the Cancer Center's nutritionist on topics relevant to patients with cancer, before, during and after treatment.

**Pediatric Parent Showcase** is an interactive evening between pediatric oncology staff, parents of pediatric patients and more than 20 local organizations dedicated to helping those involved in pediatric cancer.

**School Re-Entry Program** is a program designed to help a child diagnosed with cancer return to school by addressing the student's psychosocial, medical and educational needs.

### 2011 EDUCATIONAL PRESENTATIONS TO THE COMMUNITY

#### February 15

##### Update on Urologic Cancers

Wayne C. Waltzer, MD; Rahuldev S. Bhalla, MD; Shenhong Wu, MD, PhD; Tae Park, MD

#### March 2

##### Update on Colorectal Cancers

Roberto Bergamaschi, MD, PhD; Marvin Corman, MD; Paula Denoya, MD; William Smithy, MD; Marisa Siebel, MD

#### April 27

##### Update on Head, Neck and Thyroid Cancers

Ghassan J. Samara, MD; Mark F. Marzouk, MD; Roger S. Keresztes, MD; Edward S. Valentine, MD

#### May 14

##### Update on Melanoma with Skin Cancer Screenings

Colette Pameijer, MD; Adam Korzenko, MD

#### June 16

##### Update on Upper Gastrointestinal Cancers

Kevin Watkins, MD; Jonathan Buscaglia, MD

#### September 27

##### Update on Childhood Cancer

Robert Parker, MD; Debbie Giugliano, RN, CPNP, CPON; Thomas Lee, MD; Tamara Weiss, MD

#### October 5

##### Update on Breast Cancer

Brian O'Hea, MD; Jules Cohen, MD; Tara Huston, MD; Patricia Farrelly, MD; Paul Fisher, MD

#### November 10

##### Update on Lung Cancer

Thomas Bilfinger, MD; Sajive Aleyas, MD; Bong Soon Kim, MD; Roger Keresztes, MD

#### November 15

##### Update on Bone Marrow and Stem Cell Transplantation

Michael Schuster, MD



### Pictured above:

**Colette Pameijer, MD**, Director, Melanoma Program, presenting an update on melanoma, at Stony Brook's annual Skin Cancer Screening

**Michael Pearl, MD**, Director, Gynecologic Oncology Program, at the annual Candlelight Ceremony to honor patients and their families during Gynecologic Oncology and Ovarian Cancer Awareness Month

**Brian O'Hea, MD**, Director, Carol M. Baldwin Breast Care Center, and this year's Walk for Beauty honoree, at the kickoff with his wife, Denise, and three of their four children

**Debra Giugliano, RN, CPNP, CPON**, Director, School Re-Entry Program, and **Devina Prakash, MD**, Associate Professor of Pediatrics (right), presenting at the annual School Re-Entry Conference

# Basic and Clinical Research

## Advancing the Understanding and Treatment of Cancer

### AT STONY BROOK MEDICINE, RESEARCHERS TAKE ON THE FULL GAMUT OF CANCER RESEARCH.

We ask some of the most basic, yet complete, questions: What causes cancer? How does it spread? Is there a more accurate way to screen? We study populations in order to understand the environmental and genetic components of cancer. We investigate promising diagnostic technology. We help develop novel treatment modalities in the research laboratory. We test the latest therapies in a clinical setting and participate in multisite studies. We collaborate with national and community-based organizations. We track and catalog results, postulate and revise theories, and spend years evaluating the efficacy of medications, vaccines and procedures. We do this for one reason: To advance the understanding and treatment of cancer. As a premier academic medical center, we put the full weight of our resources, facilities and scientific talent behind this goal.

### Clinical Research Infrastructure

The General Clinical Research Center (GCRC) at Stony Brook Medicine has received high scores from the National Center for Research Resources (NCRR) of the National Institutes of Health (NIH). Also, all major components of the GCRC, which include 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 plans for future research. The NCRR cited the biostatistical and informational components of the GCRC as “a model of what bioinformatics should be.”

**Collaborators:** Led by Kenneth Kaushansky, MD, Senior Vice President, Health Sciences and Dean, Stony Brook School of Medicine, Principal Investigator; Marie C. Gelato, MD, PhD, Distinguished Service Professor, Department of Medicine, Program Director

### Examples of Cancer Research at Stony Brook Medicine

#### The Selenium and Vitamin E Cancer Prevention Trial (SELECT)

**Goal:** Now in its eleventh year, this prevention study, supported by the National Cancer Institute, was designed to study the relationship of selenium and vitamin E supplements to prostate cancer prevention. Men were enrolled in Centers throughout the United States, Canada and Puerto Rico. Stony Brook, with 372 participants, has one of the highest enrollments in the nation. After an average of 5 1/2 years, the trial found the selenium and vitamin E taken together did not prevent prostate cancer. Since the initial report, continued follow-up of the study participants recently led to a statistically significant finding of an increased risk of prostate cancer in the men that were randomly assigned to the group that only took Vitamin E. The continued long-term follow-up of the participants will provide information that will add to the understanding of prostate and other cancers.

**Collaborators:** Led by Iris Granek, MD, Principal Investigator; Dorothy S. Lane, MD, MPH, Co-Investigator.

#### Understanding the Molecular Mechanism of Hepatocellular Carcinoma by Focusing on 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 IQGAP presence in the liver on these genetically engineered mice.

**Collaborators:** Led by Valentina Schmidt, PhD, Assistant Professor, Division of Hematology

#### Technology to Detect Metastatic Tumor Cells in the Blood

**Goal:** To develop an integrated technology into a clinical blood assay that can define metastatic cancer cell gene expression in the blood, which can lead to detection of cancer in its early stage. The technology being developed can isolate cancer cells from blood, as they occur at rates of one in one billion. It is being tested for cancer of the ovary, pancreas, colon, prostate, breast and lung, and may be useful in monitoring, diagnosing and detecting cancers that are difficult to biopsy.

**Collaborators:** Wen-Tien Chen, PhD, Department of Obstetrics, Gynecology and Reproductive Medicine, is working with Michael Pearl, MD, and other clinicians at Stony Brook Cancer Center and the GCRC, both which provide blood and tissue samples of patients. As a joint venture with Stony Brook University, Dr. Chen has established a biotechnology company, Vitatex Inc., focusing on commercializing cell separation technologies in the form of blood tests for cancer diagnosis, prognosis and detection.

### Tumor-Targeting Chemotherapeutic Agents

**Goals:** The major goals are the design and development of new tumor-targeting drug conjugates with single guiding module and single warhead; the design and development of new tumor-targeting drug conjugates with multiple guiding modules and multiple warheads; and further drug discovery, preclinical studies and PET imaging of DHA-taxoids.

**Collaborators:** Led by Iwao Ojima, PhD, Director, Institute of Chemical Biology and Drug Discovery, Principal Investigator; Stanley Zurker, PhD, and Thomas Zimmerman, PhD, from the School of Medicine. Funded by the NCI.

### The National Women’s Health Initiative (WHI) Clinical Trial and Observational Study

**Goal:** The goal of this national study, funded by the National Heart, Lung and Blood Institute, is to study associations between various prevention methods and health outcomes including breast and colorectal cancer, cardiovascular disease and fractures due to osteoporosis in post-menopausal women. The original clinical trials tested the role of hormone therapy; a low-fat diet high in fruit, vegetables and grains; and calcium and vitamin D supplements. With continued follow-up through 2015, the study has had a profound effect on medical practice following the findings of post-menopausal women.

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

### WHI Decisions About Cancer Screening in Older Women Study

**Goal:** This National Cancer Institute-supported study examines the decision-making strategies used by women over age 65 for breast, cervical and colorectal cancer screening. This involves the same women enrolled in the WHI observational study at the Stony Brook Field Center.

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

## 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 Breast Cancer Research Fund, The Ward Melville Heritage Organization and the Catacosinos Fund.

### American Cancer Society

Since 1946, the American Cancer Society (ACS) has contributed \$3.6 billion to cancer research worldwide to “Create a World With More Birthdays.” Nationwide ACS is currently funding 950 grants totaling \$468,305,381. ACS-funded researchers have historically been a part of most major cancer breakthroughs. For more than 26 years, the ACS has been a strong partner of Stony Brook Medicine in the areas of patient services, support and research. Since the early 1980s, ACS has funded 95 grants totaling \$15,110,416 to researchers at Stony Brook. The ACS has funded two new grants for 2011 for a total of \$1,440,000 along with three grants still in effect for \$1,875,000, for a total of \$3,315,000.

The current grantees include:

- Edward L. Chan, MD, Department of Pediatrics, \$725,000 grant July 2009 through June 2014: RON as an Adjunct Biomarker for EGFR Expressing Head and Neck Cancer (Mentor: Michael Hayman, PhD). 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.

- Dorothy Lane, MD, MPH, Department of Preventive Medicine, \$300,000 grant through December 2012: Physician Training Award in Preventive Medicine

- Valentina Schmidt, PhD, Department of Medicine, \$850,000 grant through December 2012: Role of GTPase-activating Proteins in Liver Carcinogenesis

The grants awarded in 2011 include:

- Natalia Marchenko, PhD, Department of Pathology, \$720,000 grant through June 30, 2015: Degrading Stabilized Mutant p53 in Cancer — A Novel Targeted Strategy
- Laurie T. Krug, PhD, \$720,000 grant through June 30, 2015: Regulation of Gammaherpesvirus Latency by NF-kappaB Signaling

### National Institutes of Health Cancer Grants

Many Stony Brook Medicine physicians and scientists conduct research with the support of National Institutes of Health (NIH)-funded grants. Patrick Hearing, PhD, Department of Molecular Genetics and Microbiology, received renewal of the NIH-NCI Training Grant “Cancer Biochemistry and Cell Biology” until June 2013. The grant, which has run for 34 years, will bring in more than \$2 million to support the training for seven pre-doctoral students and four post-doctoral fellows.

In addition, the following Stony Brook investigators have been recently awarded NIH cancer grants by the NCI:

- Galina Botchkina, PhD, to study prostate cancer stem cell-directed activity of new generation taxoids
- Richard Lin, MD, to study new inhibitors to prevent pancreatic cancer
- Jerome Liang, PhD, to investigate the use of low-dose computed tomography in screening for lung cancer
- Jennie Williams, PhD, to determine the underlying mechanisms of the racial disparity in the response to chemoprevention in colon cancer

## Examples of Published Research

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

Established in 2004 in the Department of Pathology by Stony Brook Medicine and the School of Medicine, this facility banks normal, abnormal and malignant tissue specimens and serum to support the discovery of molecular diagnostics and markers of disease progression. The Tissue Bank is led by a team of experts that include Kenneth Shroyer, MD, PhD, Chair, Department of Pathology, Meenakshi Singh, MD, Vice Chair for Anatomic Pathology, Youjun Hu, MD, and Ming Wu, MD, the designated Principal Investigator for the Bank. The technical components of the Bank are supervised by Kathleen Dasilva, the Associate Technical Director of Anatomic Pathology. This team works closely with cancer surgeons and other principal investigators to obtain tissue specimens under informed patient consent. Banking biomedical tissue, stored under cryogenic conditions for medical research provides the opportunity for state-of-the-art collaborations in clinical research.

## The Cancer Clinical Trials Office

**Program Leaders:** Robert I. Parker, MD, Medical Director for Clinical Trials; Patricia Hentschel, NP, Administrative Director for Clinical Trials; Research Nurses Patricia Delli Bovi, RN, Kim Lykety, RN, Carol Martin, RN, and Susan Romano, RN, MSN; Lydia Reveron, Administrative Assistant

The Cancer Clinical Trials Office assists Stony Brook 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 activation and coordination, liaison with regulatory agencies (including the Institutional Research Review Board, National Institutes of Health, U.S. Food and Drug Administration and pharmaceutical companies), treatment safety monitoring, data management and the provision of research nursing support.

The overarching goal of the Stony Brook Cancer Center Clinical Trials Program is to provide patients with the most innovative treatments for cancer. Clinical trials offer patients access to some of 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. Patient participation in clinical trials is vital to advancing treatments for specific cancers, as this is the only mechanism by which the effectiveness of new treatments and new drugs can be determined. In fact, all of the most effective standard cancer treatments have come about because of their initial testing in clinical trials.

Because it is widely recognized that patients who participate in clinical trials experience outcomes that are at least as good, and generally better, as those for patients who are not enrolled in trials, Stony Brook patients who qualify are given the opportunity to participate in the Clinical Trials Program. All clinical trials conducted at Stony Brook Cancer Center are managed by experienced physicians

who oversee the patient's treatment for maximum safety and comfort.

The physician-investigators of the Stony Brook Cancer Center are 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 (ACOSOG), the National Surgical Adjuvant Breast and Bowel Project (NSABP), the Gynecologic Oncology Group (GOG) and the Radiation Therapy Oncology Group (RTOG). The Cancer Center Clinical Trials Office plays a critical role in these activities.

In addition, the office coordinates physician-initiated in-house therapeutic trials and phase I, II and III pharmaceutical-sponsored research trials. Approximately 150 protocols are available to patients with different types of cancer. Research nurses coordinate research activities and provide advocacy, care and education for patients receiving cancer protocol treatment.

Information on the availability of cancer-related clinical trials is given to patients through the research coordinator and nurse navigators, as well as through patient information brochures and pamphlets, websites, patient information packets, the patient library and patient support group seminars on clinical trials.

## Professional Education in Cancer July 2010 to June 2011

All conferences were held at Stony Brook University and Stony Brook Medicine (unless otherwise noted).

PROGRAM TITLE July - December 2010	DATE(s):	DEPARTMENT
Breast Conference Tumor Board	July 2, 9, 16, 23; Aug. 13, 20, 27; Sept. 10, 17, 24; Oct. 1, 8, 15, 22, 29; Nov. 5, 12, 19; Dec. 3, 10, 17, 2010	Surgery
Leukemia Lymphoma Transplant Conference Tumor Board	July 2, 16, 23; Aug. 6, 20, 27; Sept. 3, 17, 24; Oct. 1, 15, 22, 29; Nov. 5, 19; Dec. 17, 2010	Medicine-Hematology/Oncology
Colorectal Tumor Board	July 2, 16; Aug. 6, 20; Sept. 3, 17; Oct. 1, 15; Nov. 5, 19; Dec. 12, 17, 2010	Surgery
Urology Grand Rounds	July 7, 14, 21, 2010	Urology
Colorectal Ovarian Metastases	July 7, 2010	Medicine-Gastroenterology and Hepatology
Seminars in Pathology: A Continuing Update	July 7; Sept. 8; Oct. 6; Nov. 17; Dec. 1, 5, 29, 2010	Pathology
Lung Cancer Evaluation Center Tumor Board	July 7, 21; Aug. 18, 25; Sept. 15; Oct. 20, 27; Nov. 3, 17; Dec. 1, 15, 2010	Cardiothoracic Surgery
Melanoma Conference Tumor Board	July 13; Aug. 10; Sept. 14; Oct. 12; Nov. 9; Dec. 14, 2010	Surgery
Urology Tumor Board	July 13; Aug. 10; Sept. 14; Oct. 12; Nov. 9, 23; Dec. 14, 2010	Urology
Urology: Urologic Oncology	July 14, 2010	Urology
Urology: Benign Prostatic Hyperplasia	July 21, 2010	Urology
Soft Tissue/Sarcoma Conference Tumor Board	July 27; Aug. 24; Sept. 28; Oct. 26; Nov. 23; Dec. 28, 2010	Pathology
Gynecologic (GYN) Oncology Tumor Board	July 28; Aug. 4, 18; Sept. 15; Oct. 6, 27; Nov. 3; Dec. 1, 15, 2010	Obstetrics/Gynecology (OB/GYN)
Medicine-Division of Gastroenterology and Hepatology: Angiosarcoma	Aug. 18, 2010	Medicine-Gastroenterology and Hepatology
Pediatrics: The Role of Endoscopy in the Diagnosis, Treatment, Planning and Management of GI Cancers	Aug. 31, 2010	Pediatrics
Cancer Center Grand Rounds	Aug. 31; Nov. 30, 2010	Pediatrics
Medicine: Hepatocellular Carcinoma	Sept. 8, 2010	Medicine
Pathology: Intraductal Approach to Breast Cancer Screening	Sept. 8, 2010	Pathology
Radiology: MRI of the Uterus: Benign Diseases	Sept. 14, 2010	Radiology
Dermatology: Treatment of Melanoma	Sept. 16, 2010	Dermatology
Surgery: Laparoscopic Surgery for Rectal Cancer	Sept. 22, 2010	Surgery
OB/GYN: Early Detection of Ovarian Carcinoma	Sept. 29, 2010	OB/GYN
OB/GYN: Surgical and Medical Advances in the Management of Early-Stage Ovarian Cancer	Sept. 29, 2010	OB/GYN
Preventive Medicine: Health Disparities in Cancer and the Role of the Ralph Lauren Center for Cancer Care and Prevention	Oct. 1, 2010	Preventive Medicine
22nd Annual Conference on Mammography Marriott Hotel, Melville, New York	Oct. 2, 2010	Office of Continuing Medical Education
Pathology: Circulating Tumor Cells in Metastatic Breast, Colorectal and Prostate Cancer	Oct. 6, 2010	Pathology
Dermatology: Periocular Malignancies	Oct. 7, 2010	Dermatology
Family Medicine: Treatment of Breast Cancer	Oct. 20, 2010	Family Medicine
Urology Grand Rounds	Oct. 20; Nov. 3; Dec. 1, 2010	Urology
Anesthesiology: Association Between Epidural Analgesia and Cancer Recurrence After Colorectal Cancer Surgery	Oct. 28, 2010	Anesthesiology
Surgery: Managing Locally Advanced Pancreatic Cancers	Nov. 3, 2010	Surgery

PROGRAM TITLE	DATE(s):	DEPARTMENT
<b>July - December 2010 continued</b>		
Urology: Prostate Cancer	Nov. 3, 2010	Urology
Gynecology (GYN) Case Conferences/Ultrasound	Nov. 10; Dec. 29, 2010	OB/GYN
Surgery: The Changing Role of Surgery in the Management of Gastric Cancer	Nov. 24, 2010	Surgery
Pathology: Histone Deacetylase Inhibitors in Cancer Treatment: Where We Stand	Dec. 15, 2010	Pathology
Surgery: Post-Mastectomy Options for Breast Reconstruction	Dec. 15, 2010	Surgery
Pathology: Diffuse Variant of Lymphocyte Predominant Hodgkin Lymphoma (D-LPHL): A Diagnostic Challenge	Dec. 29, 2010	Pathology
<b>January - June 2011</b>		
Lung Cancer Evaluation Tumor Board	Jan. 5, 19; Feb. 2, 16; March 3, 16; Apr. 6, 20; May 4, 25; June 15, 2011	Cardiothoracic Surgery
GYN-Oncology Tumor Board	Jan. 5, 26; Feb. 2; March 3, 30; April 4, 20; May 4; June 1, 15, 2011	OB/GYN
Breast Conference Tumor Board	Jan. 7, 14, 21, 28; Feb. 4, 11, 18; March 4, 11, 18, 25; April 1, 8, 15, 22, 29; May 6, 13, 20, 27; June 3, 10, 17, 24, 2011	Surgery
Colorectal Tumor Board	Jan. 7, 21; Feb. 4, 18; March 4; April 1, 15; May 6, 20; June 3, 17, 2011	Surgery
Melanoma Conference Tumor Board	Jan. 11; Feb. 18; March 18; April 15; May 20; June 17, 2011	Surgery
Urology Grand Rounds	Jan. 12, 26; April 6; May 4, 11, 18, 25, 2011	Urology
Pathology: Soft Tissue/Sarcoma Conference	Jan. 25; Feb. 22; March 22; April 26; May 24; June 28, 2011	Pathology
Surgery: Lap TME for rectal cancer	Jan. 26, 2011	Surgery
Seminars in Pathology: A Continuing Update	Jan. 26; Feb. 2, 10; April 6, 2; March 17, 23, 30; June 29, 2011	Pathology
Surgery: Fascinomas	Jan. 28, 2011	Surgery
Urology Update for the Non-Urologist University at Sea® Cruise	Jan. 28-Feb. 6, 2011	Office of Continuing Medical Education
Surgery: Liver Transplantation for Hepatocellular Carcinoma	Feb. 16, 2011	Surgery
Radiology: Quantitative Imaging Biomarkers for the Management of Early Lung Cancer	March 3, 2011	Radiology
Family Medicine: Breast Cancer Update	March 16, 2011	Family Medicine
Surgery: Cytoreductive Surgery and Perioperative Chemotherapy for Metastatic Colon Cancer to Peritoneal Surfaces	March 23, 2011	Surgery
Cancer Center Grand Rounds	March 29; May 31, 2011	Pediatrics
Long Island Geriatric Education Center (LIGEC) Health Promotion/Disease Prevention	April 13, 2011	LIGEC
OB/GYN: Ovarian Germ Cell Tumors	April 27, 2011	OB/GYN
OB/GYN: Ovarian Sex Cord and Stromal Tumors	May 4, 2011	OB/GYN
OB/GYN: Breast Cancer Current Options and Strategies	May 11, 2011	OB/GYN
Family Medicine: Cervical Cancer	May 11, 2011	Family Medicine
Medicine: The Changing Face of Cancer Care and Research	May 11, 2011	Medicine
OB/GYN: Breast Disease and Cancer	May 18, 2011	OB/GYN
OB/GYN: Cancer During Pregnancy	May 25, 2011	OB/GYN
37th Annual Family Medicine Update	June 1-3, 2011	Office of Continuing Medical Education
Surgery Resident Research Day	June 2, 2011	Surgery
Medicine: Challenges in Colon Cancer Screening	June 8, 2011	Medicine
32nd Annual Radiology Research Seminar	June 15, 2011	Radiology

## 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; Carole Whitehead, CTR, Abstractors

#### OVERVIEW

The Cancer Registry maintains an electronic database of case records on all tumor types. Case ascertainment includes search and analysis of all inpatient, same-day-stay, emergency room admissions, ambulatory and clinic encounters, and physician practice visits for cancer care. The database contains 49,786 tumor records. Epidemiologic data and annual follow-up are maintained on 30,856 analytic cases in the active database, referenced as of January 1, 1993, for follow-up and outcome analysis. Data is maintained in accordance with national standards. Security procedures are in place for confidentiality and for disaster recovery.

Since its inception in 1984, the Cancer Registry has played an integral part in the interdisciplinary Cancer Care Program by collecting relevant information, providing statistical summaries and disseminating information about cancer program stan-

dards to 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 cancer registry statistics for research, education, grant writing, administrative planning, cancer quality dashboard and clinical outcomes measurements. Stony Brook's participation in both the American Cancer Society's datalinks website and the Commission on Cancer's National Cancer Data Base annual call for data and special studies contribute to the national database to foster research and analysis for advances in health management. The Registry most recently began providing breast cancer data to the Surgical Quality Data Use Group, and continues to provide statistics for the Cancer Quality Dashboard and Scorecard metrics.

Cancer Program Practice Profile Reports (CP3R) from the Registry are periodically reviewed to assess breast and colorectal cancer treatment patterns.

In order for collected data to meet specific quality standards, continuous quality assessments are performed on site by response to electronically programmed coding edit alerts and by physician advisor review. Data must pass New York State Central Cancer Registry and National Cancer Data Base quality edit metafiles. Physician advisors review 10 percent of analytic cases in the database for accuracy and timeliness in coding, collaborative staging and treatment, and follow up. Staff members participate in continuing education and professional association activities, and Stony Brook hosts conferences and workshops, including the Long Island Cancer Registrar Association's Education Conference.

Stony Brook Cancer Center's annual cancer incidence tables and site-specific surveys are posted on its website at [StonyBrookMedicalCenter.org/CancerRegistry](http://StonyBrookMedicalCenter.org/CancerRegistry).

### New Patients with Cancer at Stony Brook Cancer Center 2000-2010 Year-to-Year Trends

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
New Patient	2248	2238	2252	2200	2334	2381	2482	2618	2738	2863	3052
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 (+4.6%)	+125 (+4.6%)	+189 (+6.6%)

Source: Stony Brook Cancer Center Cancer Registry database all accessions.

New Patients with Cancer at Stony Brook Cancer Center 2000-2010 Trends

## 2010 Cancer Site Distribution at Stony Brook Cancer Center (SBCC), Stony Brook, NY

Primary Site, Patient Type, Gender, AJCC TNM Stage Group\*

PRIMARY SITE	TOTAL	PATIENT TYPE		GENDER		AJCC TNM STAGE GROUP						
		New	Re-tx	Male	Female	In situ	I	II	III	IV	Unk	N/A
<b>ALL SITES</b>	<b>3052</b>	<b>2270</b>	<b>782</b>	<b>1349</b>	<b>1703</b>	<b>250</b>	<b>908</b>	<b>501</b>	<b>327</b>	<b>438</b>	<b>141</b>	<b>487</b>
<b>ORAL CAVITY</b>	<b>37</b>	<b>27</b>	<b>10</b>	<b>28</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>2</b>	<b>4</b>	<b>15</b>	<b>4</b>	<b>0</b>
LIP	1	1	0	0	1	0	1	0	0	0	0	0
TONGUE	15	13	2	13	2	0	3	1	1	8	2	0
OROPHARYNX	3	2	1	2	1	0	0	0	0	3	0	0
OTHER ORAL	18	11	7	13	5	0	8	1	3	4	2	0
<b>DIGESTIVE SYSTEM</b>	<b>453</b>	<b>294</b>	<b>159</b>	<b>252</b>	<b>201</b>	<b>15</b>	<b>85</b>	<b>115</b>	<b>84</b>	<b>118</b>	<b>32</b>	<b>4</b>
COLON	119	78	41	63	56	6	18	30	21	37	7	0
RECTUM	65	35	30	36	29	1	13	12	21	15	3	0
ANUS/ANAL CANAL	1	1	0	0	1	0	0	1	0	0	0	0
ESOPHAGUS	30	15	15	20	10	1	3	6	10	7	2	1
STOMACH	46	27	19	27	19	1	17	9	6	8	3	2
LIVER	28	17	11	19	9	0	9	4	5	5	5	0
PANCREAS	115	82	33	60	55	6	15	43	13	31	7	0
OTHER BILIARY	49	39	10	27	22	0	10	10	8	15	5	1
<b>RESPIRATORY SYSTEM</b>	<b>340</b>	<b>245</b>	<b>95</b>	<b>168</b>	<b>172</b>	<b>1</b>	<b>105</b>	<b>27</b>	<b>51</b>	<b>140</b>	<b>16</b>	<b>0</b>
NASAL/SINUS	3	2	1	2	1	0	0	1	0	2	0	0
LARYNX	18	13	5	14	4	1	5	3	5	3	1	0
LUNG/BRONCHUS	316	229	87	150	166	0	99	23	46	135	13	0
PLEURA	3	1	2	2	1	0	1	0	0	0	2	0
<b>BLOOD &amp; BONE MARROW</b>	<b>186</b>	<b>97</b>	<b>89</b>	<b>114</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>186</b>
LEUKEMIA	96	55	41	59	37	0	0	0	0	0	0	96
MULTIPLE MYELOMA	73	40	33	46	27	0	0	0	0	0	0	73
OTHER HEMATOPOIETIC	17	2	15	9	8	0	0	0	0	0	0	17
<b>BONE</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>CONNECT/SOFT TISSUE</b>	<b>20</b>	<b>17</b>	<b>3</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>9</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>
<b>SKIN</b>	<b>181</b>	<b>158</b>	<b>23</b>	<b>110</b>	<b>71</b>	<b>50</b>	<b>67</b>	<b>30</b>	<b>15</b>	<b>3</b>	<b>10</b>	<b>6</b>
MELANOMA	166	149	17	100	66	50	63	28	11	3	9	2
OTHER	15	9	6	10	5	0	4	2	4	0	1	4
<b>BREAST</b>	<b>556</b>	<b>450</b>	<b>106</b>	<b>3</b>	<b>553</b>	<b>114</b>	<b>229</b>	<b>92</b>	<b>53</b>	<b>46</b>	<b>22</b>	<b>0</b>
<b>FEMALE GENITAL</b>	<b>225</b>	<b>181</b>	<b>44</b>	<b>0</b>	<b>225</b>	<b>50</b>	<b>108</b>	<b>11</b>	<b>27</b>	<b>17</b>	<b>10</b>	<b>2</b>
CERVIX UTERI	67	60	7	0	67	38	15	6	4	4	0	0
CORPUS UTERI	95	73	22	0	95	1	75	3	9	2	5	0
OVARY	40	29	11	0	40	1	8	0	13	11	5	2
VULVA	18	14	4	0	18	10	6	1	1	0	0	0
FALLOPIAN TUBE	5	5	0	0	5	0	4	1	0	0	0	0
<b>MALE GENITAL</b>	<b>301</b>	<b>224</b>	<b>77</b>	<b>301</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>175</b>	<b>18</b>	<b>19</b>	<b>17</b>	<b>0</b>
PROSTATE	285	208	77	285	0	0	64	170	15	19	17	0
TESTIS	13	13	0	13	0	0	7	3	3	0	0	0
PENIS	3	3	0	3	0	0	1	2	0	0	0	0
<b>URINARY SYSTEM</b>	<b>153</b>	<b>115</b>	<b>38</b>	<b>114</b>	<b>39</b>	<b>20</b>	<b>72</b>	<b>14</b>	<b>14</b>	<b>24</b>	<b>5</b>	<b>4</b>
BLADDER	71	51	20	58	13	19	25	10	7	5	5	0
KIDNEY/RENAL PELVIS	81	64	17	55	26	1	47	4	6	19	0	4
URETER	1	0	1	1	0	0	0	0	1	0	0	0
<b>BRAIN &amp; CNS</b>	<b>162</b>	<b>123</b>	<b>39</b>	<b>67</b>	<b>95</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>162</b>
BRAIN (BENIGN)	20	17	3	8	12	0	0	0	0	0	0	20
BRAIN (MALIGNANT)	41	34	7	25	16	0	0	0	0	0	0	41
OTHER CNS	101	72	29	34	67	0	0	0	0	0	0	101
<b>ENDOCRINE</b>	<b>230</b>	<b>199</b>	<b>31</b>	<b>66</b>	<b>164</b>	<b>0</b>	<b>110</b>	<b>15</b>	<b>35</b>	<b>12</b>	<b>5</b>	<b>53</b>
THYROID	177	160	17	43	134	0	110	15	35	12	5	0
OTHER ENDOCRINE	53	39	14	23	30	0	0	0	0	0	0	53
<b>LYMPHATIC SYSTEM</b>	<b>134</b>	<b>83</b>	<b>51</b>	<b>82</b>	<b>52</b>	<b>0</b>	<b>38</b>	<b>15</b>	<b>21</b>	<b>41</b>	<b>17</b>	<b>2</b>
HODGKIN'S LYMPHOMA	19	11	8	10	9	0	4	7	3	2	3	0
NON-HODGKIN'S LYMPHOMA	115	72	43	72	43	0	34	8	18	39	14	2
<b>OTHER/ILL-DEFINED</b>	<b>11</b>	<b>9</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>7</b>
<b>UNKNOWN PRIMARY</b>	<b>60</b>	<b>45</b>	<b>15</b>	<b>29</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>

\*American Joint Committee on Cancer (AJCC) Tumor-Node-Metastasis (TNM) staging system includes all inpatients and outpatients first seen in 2010 at SBCC.

## Tumor Boards

### OVERVIEW

Tumor Board conferences are a key component of the Cancer Care Program and integral to patient management at Stony Brook Medicine. They provide a valued forum for education, consultation and collaboration. Tumor Board meetings also provide opportunities to participate in research protocols and consider new and emerging standards for patient management. Disease Management Teams present cases for diagnostic assessment of prognostic indicators, clinical and pathologic staging and consultation. At the same time, the group reviews treatment guidelines, clinical research protocols and other relevant literature for treatment planning and retreatment, as well as analyzes outcomes during all phases of care. In addition, during treatment planning and outcomes assessment, the groups reference clinical staging, molecular markers, existing prognostication methods, and nationally recognized patient management guidelines and clinical trials.

### HIGHLIGHTS

During the 2010-2011 year, a total of 13 multidisciplinary departmental and site-focused Tumor Board groups held 24 meetings per month at Stony Brook Medicine. At eight of the 13 Tumor Board and cancer conferences held at Stony Brook, AMA Category 1 CME credits were offered to eligible attendees (notified in advance via targeted communications).

During this same time period, physicians representing Diagnostic Radiology, Pathology, Surgery, Radiation and Medical Oncology participated in ongoing facility-wide conferences. Other participants included representatives from Pulmonary Medicine, Dentistry, Nursing, Pain Management, Social Work, Pharmacy, Genetics, Nutrition, Speech and Physical Rehabilitation, Cancer Registry and Clinical Trials. Faculty, residents, interns, fellows and students in all specialties had an open invitation to attend and participate in discussion, relevant to clinical education.

### Tumor Board Schedule Stony Brook Medicine 2011

Breast CME	Fridays, 7:30 am	Weekly
Colorectal CME	Fridays, 2 pm	Weeks 1 and 3
Gynecologic Oncology CME	Wednesdays, 7 am	Weeks 1 and 3
Head and Neck and Thyroid	Tuesdays, 7:30 am	Week 3
Leukemia/Lymphoma CME	Fridays, 9:30 am	Weeks 1, 3 and 4
Liver	Mondays, 2:30 pm	Week 1
Lung CME	Wednesdays, 3:30 pm	Weeks 1 and 3
Melanoma CME	Fridays, 7:30 am	Week 3
Neurologic Oncology	Tuesdays, 5 pm	Week 3
Pediatric	Mondays, 4 pm	Weeks 2 and 4
Sarcoma CME	Tuesdays, 7:30 am	Week 4
Upper GI and General Oncology	Tuesdays, 7:30 am	Week 3
Urology CME	Tuesdays, 7:30 am	Week 2 and 4
*Cancer Center Grand Rounds CME	5th Tuesdays, 7:30 am	3/29, 5/31, 8/30, 11/29

Meetings are held in the Pathology Conference Room 766, Stony Brook University Hospital, Level 2. Exceptions are Melanoma, held in Surgical Conference Room, HSC, T19-020; Urology (4th Tuesday) in the Urology Conference Room, HSC, L9. \*Grand Rounds are held in the HSC, LH5; CME approval as noted above. Clinical faculty, health science students and clinical staff are invited.

## Quality Management

**Program Leaders:** William Greene, MD, Chief Quality Officer; Theodore Gabig, MD, Adult Cancer Center Associate Director; Colette Pameijer, MD, Cancer Liaison Physician; Rose Cardin, RN, Nursing Administration; Christine Northam-Schuhmacher, RN, BSN, MS, Quality Management Practitioner

### Implementation

Because cancer program standards demand that patients receive care and experience outcomes comparable to nationwide benchmarks, Stony Brook developed a Cancer Services Dashboard and Cancer Services Balanced Scorecard. Using input from the site-focused Disease Management Teams, cancer service leaders and professional staff, data are collected on selected indicators and compared to benchmarks. The Cancer Committee reviews and publishes site-focused outcomes studies annually. Departments review and utilize national guidelines — such as those provided by the National Comprehensive Cancer Network and Commission on Cancer — and use them to monitor quality and improve care. The Program's progress is reviewed and tracked, as it moves toward becoming a High Reliability Organization, error-free, over time.

### OVERVIEW

Cancer Services leadership works to ensure the delivery of safe, effective, efficient and accessible patient care through focused programs and targeted quality management tools that encourage the creation, assessment, re-evaluation and redesign of processes and systems. With the assistance of our Continuous Quality Improvement Department specialists, each Cancer Services staff member plays a role in performance improvement based on priorities determined to positively impact our patient care and outcomes.

## 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 University Hospital and the community, between the national standards organizations and University Hospital, and between the Cancer Committee and various departments at Stony Brook Medicine. The liaison collaborates with the Cancer Committee to meet and exceed cancer program standards and improve clinical practices. The liaison works with Disease Management Teams to develop best practices, evaluate compliance with adopted guidelines, 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, as well as participates in peer group meetings to provide direction according to criteria established by the American College of Surgeons Commission on Cancer (CoC). Stony Brook also works with the New York State Consortium toward comprehensive cancer control.

### Implementation

The liaison's priority for 2011 has been preparation for the scheduled CoC review. Stony Brook was last reviewed in 2008, receiving accreditation with commendation. The performance on CoC-designated breast and colon cancer quality metrics remains at or well above New York State and regional benchmark levels, and the internal quality dashboard is continually updated based on National Comprehensive Cancer Network guidelines for patient management. The program continues to encourage participation in clinical trials and has expanded community education efforts with regularly scheduled community updates, free seminars that address basic disease information and the latest treatment options for many cancers commonly treated at Stony Brook. Partnership with the ACS has strengthened in this past year, with 377 referrals to the ACS patient navigators.

## The Cancer Committee

The Cancer Committee of the Medical Staff is the designated multidisciplinary body for the administrative oversight, development and review of the cancer program at Stony Brook Medicine. The Committee communicates directly with Stony Brook'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. The Committee's composition must include clinicians from Surgery, Medical Oncology, Radiation Oncology, Diagnostic Radiology, Pathology, Survivorship and Physical Rehabilitation, along with a cancer liaison physician, clinical research manager, pain control and palliative care specialist, and representatives from University Hospital administration, Nursing, Social Services, Cancer Registry and Quality Assurance. The Committee also has representation from community oncologists. In 2010, a permanent member representing the American Cancer Society joined the committee.

The Committee is charged with providing leadership to plan, initiate, stimulate and assess the institution's cancer-related activities in accordance with the CoC's requirements for cancer program accreditation. Committees and work groups meet on Cancer Leadership, Breast Program Leadership, Cancer Quality Service, Tumor Board Conferences, and Community Outreach and External Relations. Clinical quality assessments in 2010 and 2011 were coordinated by the Committee's liaison physician to the American College of Surgeons, with a focus on metrics selected by the 12 Disease Management Teams and the departments essential to the teams: Surgery, Pathology, Medical Oncology, Radiology, Radiation Oncology and Nursing. The Committee performed data quality assessments and cancer site-specific outcomes studies. Under the leadership of the Cancer Committee, Stony Brook's Breast Care Program was

awarded national accreditation; Stony Brook Medicine's overall Cancer Program received continued accreditation with an outstanding achievement award from the American College of Surgeons Commission on Cancer; and Stony Brook earned recognition as a Teaching Hospital-Approved Cancer Program with full commendation on all standards.

The cancer conference coordinator implemented a Cancer Center Grand Rounds series, held on the fifth Tuesday of the month, 2010-2011. The seminars attract medical students, faculty, researchers and community physicians who are interested in continuing medical education topics.

### PHYSICIAN MEMBERS

Theodore G. Gabig, MD Hematology/Oncology, Committee Chair  
 Roberto Bergamaschi, MD, PhD, Colorectal Surgery  
 Rahuldev Bhalla, MD, Urologic Surgery  
 Thomas Bilfinger, MD, Thoracic Surgery  
 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  
 Michael Pearl, MD, Gynecologic Oncology  
 Michael W. Schuster, MD, Leukemia, Lymphoma and Transplantation  
 Meenakshi Singh, MD, Pathology  
 Michael Theodorakis, MD, Community Medicine Oncologist  
 Tamara Weiss, MD, Radiation Oncology

### NON-PHYSICIAN MEMBERS

Teresa Beutel, Healthcare Teleservices  
 Linda Bily, Patient Advocacy and Community Outreach Coordinator  
 Rose C. Cardin, RN, Cancer Services Administration  
 Jennifer Fitzgibbon, RD, Oncology Nutrition  
 Jeannie Gaspard, RN, OCN, Ambulatory Cancer Center Administration  
 Patricia Hentschel, RN, OCN, Clinical Trials  
 Vincine Kelly, CTR, Cancer Registry and Committee Coordinator  
 Susan McCarthy, LMSW, Social Work Services  
 Kathleen Noone, RN, Radiation and Medical Oncology Unit Administration  
 Christine Northam-Schuhmacher, RN, Quality Management  
 Lori Tischler, RN, Cancer Helpline  
 Cathy Tuppó, PT, CLT-LANA, Physical Rehabilitation  
 Stephen Unger, Chaplaincy  
 Jacqueline Wands, American Cancer Society  
 Scot Weber, RPh, Pharmacy

## Investing in the Best Ideas in Medicine



Golden Globe®-winning actress Ann Jillian (center) with Mark and Gloria Snyder (at left) and Kenneth Kaushansky, MD, Senior Vice President, Health Sciences, and Dean, Stony Brook School of Medicine, and his wife, Lauren Kaushansky, Instructor, Professional Education Program, Department of History, Stony Brook University, at National Cancer Survivors Day

### Cancer Survivors Day — An Inspiring Tradition

Stony Brook's seventh annual Cancer Survivors Day featured, for the first time, an inspirational keynote address by Golden Globe® winner and Emmy Award®-nominated actress Ann Jillian. The famous entertainer and inspiration for the TV film, "The Ann Jillian Story," brought joy to hundreds through humor and song, as she told her story of triumph over cancer. Ann Jillian's appearance was made possible by a generous contribution from Gloria and Mark Snyder.

A breakfast honoring participants in Stony Brook's clinical trials was also made possible through the generous contributions of several donors. Participants and their families were treated to a performance capturing the emotional and physical journey of cancer treatment.

Updates on cutting-edge research in gynecologic oncology by Michael Pearl, MD, Director, Gynecologic Oncology, and Kenneth Kaushansky, MD, included the important role of blood cells and their relationship to cancer treatment.

A pre-event reception at the home of Dr. and Mrs. Lauren Kaushansky featured Ted Kennedy Jr., who shared his personal survivor experiences with the attendees. Through the continued generosity of our donors, Mr. Kennedy will return as next year's keynote speaker.

Joining the Snyders in supporting this event were Stony Brook University Hospital; Stony Brook School of Medicine; Fran and John Gutleber, Americana Manhasset; Filomena Lombardi; Realty Connect/Team Ardolino; Leah Dunaief; and Times Beacon Record Newspapers.

The 2011 Cancer Care Report was developed by Stony Brook Medicine's Cancer Committee and published by the Office of Communications, Stony Brook, New York, October 2011.

**Assistant Vice President, Communications:** Yvette St. Jacques

**Senior Director, Public Affairs and Marketing:** Clinton Weaver, MBA

**Senior Director, Medical Center Communications:** Rachel Velocci

**Director, Medical Center Publications:** Michele Vallone  
**Editors:** Jo-Ann Oakes, Therese Keller

**Marketing and Advertising Specialist:** Joan Garvey

**Writer:** Ink Tank

**Cancer Report Liaison:** Vincine Kelly, CTR

**Art Director:** Karen Leibowitz

**Principal Designer:** Gail M. Swedberg

**Designer:** Allison Schwartz

**Photography:** Deirdre Flynn; John Griffin/Office of University Communications; Sam Levitan; Media Services; Lynn Spinnato; Juliana Thomas; Heather Walsh; Courtesy of Ward Melville Heritage Organization

Stony Brook University/SUNY is an affirmative action, equal opportunity educator and employer. This publication can be made available in an alternate format on request. 11061331H ©2011

## Cancer Center Phone Numbers

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

Cancer Center .....	638-1000
Cancer Helpline .....	(800) 862-2215
Cancer Registry .....	444-9844
Carol M. Baldwin Breast Care Center .....	638-1000
Chaplaincy .....	444-7775
Child Life Program .....	444-3840
Clinical Trials .....	638-0839
Colorectal Surgery .....	444-2704
Dermatology .....	444-4200
Diagnostic Radiology .....	638-2121
Gynecologic Oncology .....	638-1000
Head and Neck Oncology .....	444-8410
HealthConnect® .....	444-4000
Hematology/Oncology .....	638-1000
Leukemia/Lymphoma/Transplant .....	638-1000
Lung Cancer Evaluation Center .....	444-2981
Neurosurgical Oncology .....	444-1210
Nursing Administration .....	444-2780
Nutrition .....	638-1000
Pain Management Services .....	638-0800
Pathology .....	444-2222
Patient Education Services .....	638-1000
Pediatric Oncology .....	444-7720
Physical and Lymphedema Therapy .....	444-4240
Preventive Medicine .....	444-2190
Radiation Oncology .....	444-2200
Social Work Services .....	444-2552
Support Groups .....	444-4000
Surgical Oncology .....	444-1825
Survivorship and Supportive Care .....	444-2052/638-2801
Upper Gastrointestinal Cancer Services .....	444-8052
Urologic Oncology .....	444-1948



[cancer.stonybrookmedicine.edu](http://cancer.stonybrookmedicine.edu)



**Stony Brook Cancer Center**  
Stony Brook, NY 11794

**(631) 638-1000**