

ANNUAL REPORT 2011-2012

# CRANES OF HOPE

BEEBE MEDICAL CENTER

TUNNELL CANCER CENTER



HEALING BODIES, MINDS, AND SPIRITS EVERY DAY.



Beebe Medical Center

ROBERT & EOLYNE

**Tunnell  
Cancer  
Center**



ACCREDITATION WITH  
COMMENDATION



## In Japan, the crane embodies hope, beauty, and good fortune.

A *senbazuru* is a chain of 1,000 origami cranes. Japanese tradition holds that making a *senbazuru* will grant a wish, and they are often given as gifts to people facing illness. The crane, known in Japan as the *tancho*, has for generations embodied hope, beauty, and good fortune. Many times a family or group of people have come together to accomplish this labor of love.

Thirteen-year-old, Lewes, Delaware, resident Sarah Hawtof, in honor of her Bat Mitzvah, joined Tunnell Cancer Center in producing the Cranes of Hope project. She engaged her school friends, members of local scout troops, and community organizations to make the origami cranes. Members of the Mispillion Art League in Milford also joined in the effort. The result: hundreds of colorful cranes, each with a message written inside, that decorate the Tunnell Cancer Center.

All patients and visitors to Tunnell Cancer Center had the opportunity to share in this project of hope. Not only did they enjoy seeing the cranes, they also could read these inspirational messages simply by accessing a computer touch screen in the lobby. And, in addition, patients and visitors were encouraged to write their own messages.



*Sarah Hawtof, Cranes of Hope project coordinator*

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## Tunnell Cancer Center

The Robert & Eolyne Tunnell Cancer Center at Beebe Medical Center's mission is to provide both hope and cure. From diagnosis through treatment and beyond, the patients at the Tunnell Cancer Center are never alone. Physicians, nurses, and staff, as part of the multidisciplinary approach, are there to listen, support, and encourage.

Every patient is treated as an individual. A multidisciplinary team meets weekly to discuss each newly diagnosed case to consider treatment options and to establish the most appropriate treatment protocol. A cancer care coordinator follows each case. Research nurses review clinical trials for participation opportunities.

10,258 patients have received care at Tunnell Cancer Center since its inception in 1995.

### TUNNELL CANCER CENTER TEAM

Top row: Andrejs V. Strauss, MD, radiation oncologist; Brian Costleigh, MD, radiation oncologist; Owen Thomas, MD, radiation oncologist; | Bottom row: Nouman Asif, MD, medical oncologist; Isabel Benson, NP-C, AOCNP, oncology nurse practitioner; Liz Wilson, FNP-BC, nurse practitioner; Srihari Peri, MD, medical oncologist; Jennifer Hung, MD, radiation oncologist; Aasim Sehbai, MD, medical oncologist; Muhammad Arif, MD, medical oncologist





## Chairman's Message

BY BRIAN COSTLEIGH, MD

*Radiation Oncologist*

*Chairman of the Beebe Medical Center Cancer Committee*



This year has been marked by a growth in our professional team and in the scope of the cancer services we provide our community. We have welcomed physicians and clinical professionals to our Medical Staff. We have expanded our surgical offerings, as well as our preventive care and outreach programs. And, we have expanded our technology capabilities.

Possibly the most historic expansion of our services was our affiliation in 2012 with Nanticoke Cancer Center Services. This affiliation allows our medical and radiation oncologists to treat patients at Nanticoke's facility in Seaford. It enables Nanticoke to continue to be a full-service cancer center, and it exemplifies the commitment within Delaware's cancer community to make sure that all those living in Delaware have access to quality cancer care.

First and foremost, our priority is to provide quality and excellence of care to our patients. For the third time in a row, the American College of Surgeons' Commission on Cancer has granted Tunnell Cancer Center a Three-year Accreditation with Commendation. This Commendation status, which is in addition to an accreditation, reflects the Commission's recognition of the quality medical care that we provide. We also have entered into a quality certification initiative that provides us with a guideline on self-examination with a goal of improvement. This initiative, Quality Oncology Practice Initiative (QOPI®), is under the auspices of the American Society of Clinical Oncology, a non-profit organization of oncology professionals focusing on improving care and advancing research. By mid 2012, we had reached the QOPI certification-pending status and expect to complete the process soon.

We continue to take a multidisciplinary approach to cancer care. Our Tumor Board meets weekly, bringing clinical specialties together to discuss how to treat each new patient. This multidisciplinary approach has expanded throughout the Beebe Medical community to include several different specialty physicians, including obstetrician-gynecologists, gastroenterologists, radiologists, general surgeons, and surgical oncologists, making sure that the whole patient is considered as a treatment regimen is developed.

I applaud the commitment this team has made to our patients and to our community. And, I thank all of you who have supported our efforts in bringing quality cancer care to our friends, our families, our neighbors, and all of those who come through our doors.

Dr. Brian Costleigh

### BEEBE MEDICAL CENTER CANCER COMMITTEE ROSTER 2012

MUHAMMAD ARIF, MD	REV. KEITH GOHEEN	RICHARD PAUL, MD	JOY SNOW, PHARM.D, BCPS
NOUMAN ASIF, MD	JASON HAER	DARETH PENUEL, RN	JAMES E. SPELLMAN, JR., MD
ISABEL BENSON, NP-C, AOCNP	CLARA HIGGINS, DO	SRIHARI PERI, MD	ANDREJS STRAUSS, MD
DEBORAH CAMPBELL, RN	LUANNE HOLLAND	MARGARET PORTER, RN	ANN TYNDALL
BRANDI CARR, RN	CAROL HUNT	JUDITH RAMIREZ, EdD	MARY VAN BERGEN, RN
ALLISON CLOBES, RN	JUDE JOHNSON-SHUPE	MICHAEL RAMJATTANSINGH, MD	LYNNE VAN PELT, RN
KATHY COOK, RN	CHEYENNE LUZADER	CHERRIE RICH, RN	KIM WESTCOTT, MS, RD
BRIAN COSTLEIGH, MD	DONNA MISKIN, RN, OCN	ANIS SALIBA, MD	CLARE WILSON, RN
JOSEPH DEPENBUSCH, MD	HELEN MOODY, CTR	AASIM SEHBAI, MD	ELIZABETH WILSON, FNP-BC





# Pancreatic Cancer

BY MUHAMMAD ARIF, MD, *Medical Oncologist*

CHIA-CHI WANG, DO, *Surgical Oncologist*



Public awareness regarding pancreatic cancer and its complex nature has increased in recent years following the well-publicized illnesses and deaths of Apple founder Steve Jobs and actor Patrick Swayze, as well as the recovery of Supreme Court Justice Ruth Bader Ginsburg.

Pancreatic cancer is one of the most challenging cancers to the medical community. It is one of few cancers in which survival rates have not improved. On average, only about 6% of patients survive more than five years.

Generally there are no symptoms in the early stages. As a relatively rare cancer, it does not draw large funding sources for research. The National Cancer Institute, for example, spends only about 2% of its annual research budget on pancreatic cancer research, the Pancreatic Cancer Action Network reports.

There are no general screening tests. Unless it is diagnosed in an early stage through a CT scan for an unrelated illness. For example, it normally is diag-

nosed in a later stage and after it has metastasized. Research published in 2012 has revealed that it appears to be a slow-growing cancer that can take decades before it is diagnosed. This finding offers new opportunity for further research into methods of earlier diagnosis so that treatment can begin in an early stage.

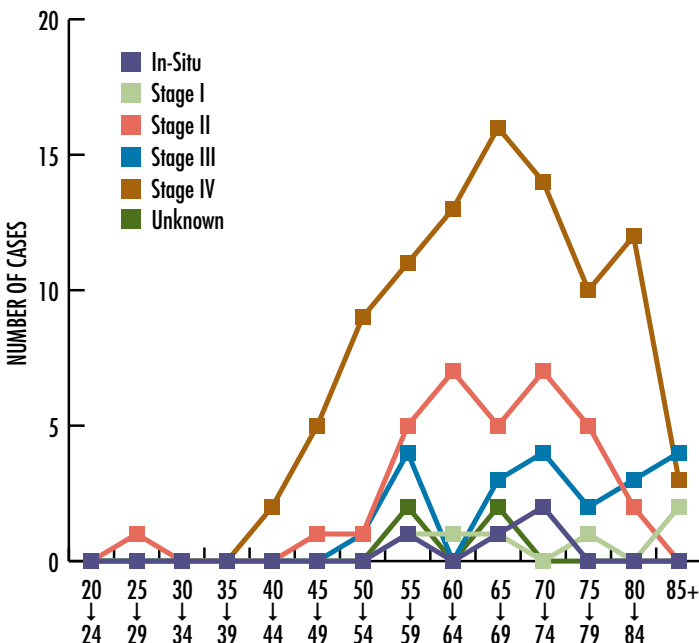
## RISK FACTORS

Age is the No. 1 risk factor. The number of cases increases as people age. At Tunnell Cancer Center, 1,027 pancreatic cancer patients, or about a third of those diagnosed between 2001 and 2011, were 75 years of age or older. During the same time period, 15 patients, or less than 1%, were under the age of 40 when diagnosed.

Inherited gene mutations (family history), nationwide, has been associated with 10% of pancreatic cancers. Cigarette smoking stands out as a lifestyle risk factor. Obesity follows, as does type 2 diabetes. While alcohol consumption is not listed as a risk factor, cirrhosis of the liver and chronic pancreatitis are.

## BEEBE MEDICAL CENTER PANCREAS CASES 2001–2011 BY AGE

Age by AJCC Stage



Data Source: Tumor Registry, Rocky Mountain Cancer Database System, Delaware Cancer Registry  
BMC: 164 cases

## TYPES OF PANCREATIC CANCER

The pancreas has **exocrine cells** and **endocrine cells**, and these cells form different types of cancers.

**Exocrine:** More than 95% of the cells in the pancreas are exocrine glands and ducts. Tumors of the exocrine cells are the most common.

**Adenocarcinoma** occurs in exocrine cells and most often develops in the ducts. Less common cancers that form in the ducts include adenosquamous carcinomas, squamous cell carcinomas, and giant cell carcinomas.

**Endocrine:** Cancers of endocrine cells are relatively rare. They are known as pancreatic **neuroendocrine tumors (NET)**, or **islet cell tumors**. They are named according to the hormone that the cell makes. For example: **gastrinomas**, in cells that make gastrin, and **insulinomas**, in cells that make insulin.

**Other tumors, cysts, and neoplasms that develop in the pancreas:**

**Intraductal papillary mucinous neoplasm (IPMN):** These lesions form in the main pancreatic



Oncology pharmacist Cheryl Hoechner, left, works with pharmacy technician Kari Schreffler to formulate chemotherapy prescriptions.

duct or one of the branches. They can cause abdominal pain, nausea, vomiting, and jaundice. They also begin as benign but can progress to a malignant state.

**Cystic, Mucinous, and Serous Neoplasms:**

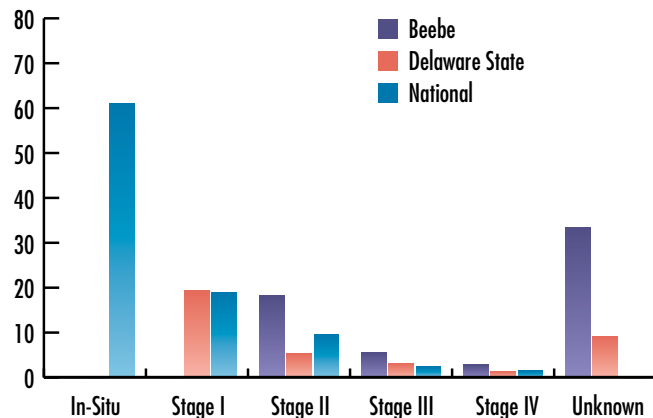
These neoplasms develop in the pancreas of women in their 40s and 50s. They can cause a feeling of fullness, abdominal pain, nausea, and weight loss. They should be surgically removed as they can develop into pancreatic cancer.

**DIAGNOSIS**

If a pancreatic cancer is not diagnosed early by chance, a physician can be alerted of the possibility of a tumor by such symptoms as jaundice, deep vein

**PANCREAS 5-YEAR SURVIVAL 2000–2007**

Observed Percentage Rates by Best AJCC Stage



<sup>^</sup> = Standard error was > 10% or fewer than 10 cases used for calculations  
 Data Source: Beebe Medical Center, Diagnosed 2000–2007  
 Delaware State Cancer Registry, Diagnosed 2000–2007  
 National numbers NCI, Commission on Cancer, ACoS, Diagnosed in 2003–2005  
 Data reported from all States, 1,450 Programs (National)

thrombosis, or hypoglycemia. Blood tests, imaging studies, and biopsy can be used to determine the underlying cause of these symptoms.

**TREATMENT**

Pancreatic cancers are treated according to their type and their stage. The National Comprehensive Cancer Network (NCCN) has established evidence-based treatment guidelines that are shared amongst oncology clinicians. Tunnell Cancer Center takes a multidisciplinary approach, starting with a knowledge-sharing atmosphere in which each case is discussed at a weekly Tumor Board meeting. Here, oncologists, surgical oncologists, pathologists, radiologists, and others involved in the care of a patient determine the best treatment regimen for each individual patient.

For staging purposes, the Beebe Gastroenterology practice offers endoscopic ultrasound. Depending upon a number of variables, including the stage of the cancer, the treatment regimen can be surgery, chemotherapy, radiation, or together one or more. Of the 25 cases diagnosed at Tunnell Cancer Center in 2011, the majority, 15, received chemotherapy only, and four included surgery as part of the regimen. Those four were diagnosed in either stage I or stage II. Surgery is not normally performed in later stages.

**SURGICAL MANAGEMENT**

The Beebe Surgical Oncology practice, in the past year, has expanded the types of cancer surgeries that its fellowship-trained surgical oncologists perform as part of treatment regimens. Surgeries have included the Whipple’s procedure and distal pancreatectomy to remove an adenocarcinoma. IPMN and cystic, mucinous, and serous neoplasms also were treated surgically.

**OUTCOMES**

Tunnell Cancer Center percentage survival rates are better than both state and national rates. The five-year survival rate between 2000 and 2007, for example, was 18.2% for a stage II diagnosis at Tunnell Cancer Center compared to a national rate of 9.5%. The survival rate at Tunnell Cancer Center during the same period at stage IV was 2.8% compared to the national rate of 1.6%. These comparisons, while noteworthy, are not statistically significant because of the small number of patients at Tunnell Cancer Center. However, Tunnell Cancer Center patients with pancreatic cancer are doing better than the national averages.



# Chronic Lymphocytic Leukemia (CLL) & Multiple Myeloma



BY AASIM SEHBAI, MD, *Medical Oncologist*

Chronic lymphocytic leukemia (CLL) and multiple myeloma together represented fewer than 3% of the cases treated at Tunnell Cancer Center during 2011. CLL is the most common adulthood leukemia and incidence increases in aging population. We are seeing more cases of multiple myeloma in our practice as well. Both have established treatment protocols under the guidelines of American Cancer Society (ACS) that in recent years have shown improvements in patient outcomes.

CLL progresses slowly and often is unrecognized for years. Though patients with CLL generally have no symptoms, they may suffer from fatigue, weight loss, or frequent infections. Patients also have a risk of developing immune system disorders or, in about 5% of cases, having their cancer transform into an aggressive type of non-Hodgkin lymphoma known as Richter syndrome.

CLL can be detected in its early stages through routine blood work, which reveals the increase in the number of white blood cells and lymphocytes. In the early stage of this disease, it is often preferable to postpone treatment while monitoring the patient's disease state. Because the leukemia is slow growing, the side effects of any treatment can be more problematic than the benefit it may produce.

Treatment is initiated when the cancer is in advanced stage or if patients are symptomatic. There are several options that include chemotherapy and targeted drug therapies. Survival rates are good with CLL and anticipated to improve as new treatments are in the pipeline. Even a vaccine is in the clinical trial stages and looks promising. The five-year survival rate for Tunnell Cancer Center patients between 2000 and 2007 was 68.4%, slightly higher than the national average of 62.3%. Tunnell Cancer Center's rate was based on 48 cases compared to 13,342 cases at the national level. Tunnell Cancer Center diagnosed eight cases in 2011.

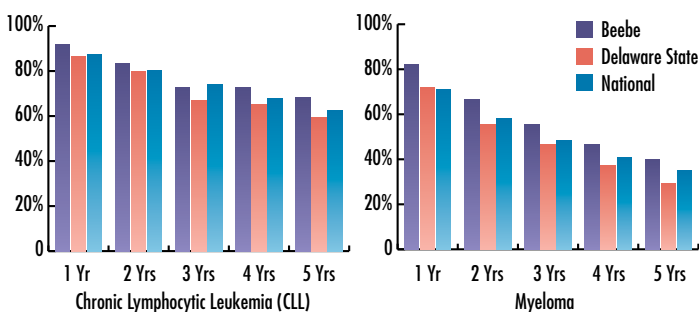
Multiple myeloma is a malignancy of bone marrow involving plasma cells. It is more aggressive than CLL, attacking the plasma cells and leading to a disruption in the normal blood chemistry. This cancer also leads to a weakened immune system, negative effects on bones and the nervous system, and kidney failure. Symptoms include anemia, elevated levels of calcium in the blood, back pain, fractures, and repeated infections.

Multiple myeloma can be detected in blood and urine tests but is diagnosed through a bone marrow biopsy that can be done on an outpatient basis. Tunnell Cancer Center diagnosed 19 patients in 2011.

The treatment regimen prescribed depends upon the age of the patient. Patients below the age of 65 may be candidates for stem cell transplants, which have shown success. Those patients older than 65 years of age can benefit from a regimen of chemotherapy treatments, corticosteroids, or other targeted drugs. Radiation is sometimes employed, but surgery is rare. The survival rates have improved greatly over recent years, and periods of remission are not uncommon. A decade ago, the survival rate was two to three years. Today, it is about seven to eight years. The five-year survival rate for Tunnell Cancer Center patients between 2000 and 2007 was 39.8%, slightly higher than the national average of 35.1%, though probably not statistically significant. Tunnell Cancer Center's rate was based on 45 cases as compared to 27,045 at the national level.

## CLL & MYELOMA 5-YEAR SURVIVAL RATE 2000-2007

Observed Percentage Rates Overall



<sup>^</sup> = Standard error was > 10% or fewer than 10 cases used for calculations  
Data Source: Beebe Medical Center, Diagnosed 2000-2007  
Delaware State Cancer Registry, Diagnosed 2000-2007  
National numbers NCDR, Commission on Cancer, ACS, Diagnosed in 2003-2005  
Data reported from all States, 1,429 Programs (National)

# Cancer Registry

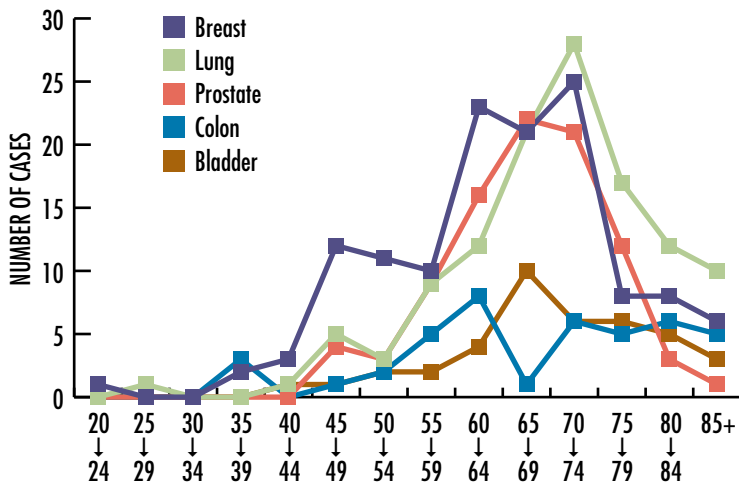
Data on cancer incidence, type, stage at diagnosis, treatment, and survival is collected by the Cancer Registry and reported to the Delaware State Central Registry. Registry data is also submitted to the National Cancer Data Base, which uses this information to monitor cancer trends, plan cancer prevention programs, help set priorities, and advance medical research efforts.



Marie Michael, Tumor Registrar; Helen Moody, CTR; and Susan Cadwallader, CTR, enter Beebe's patient data into the Tumor Registry so it can be compared with state and national outcomes.

## COMPARISON REPORT BY AGE BEEBE MEDICAL CENTER—2011 TOP 5 SITES

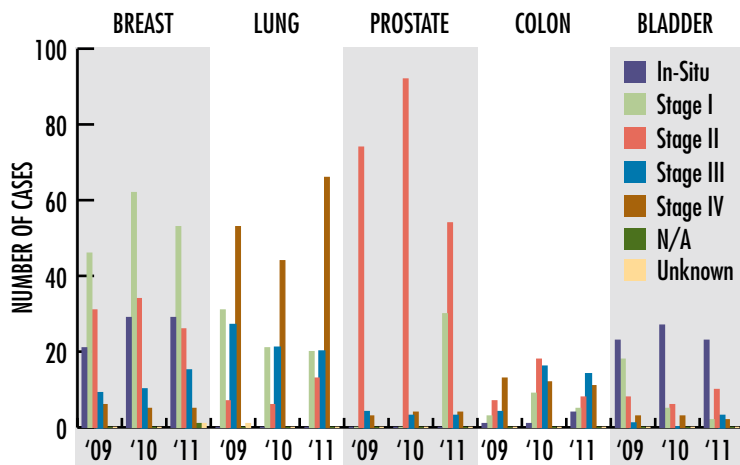
Analytical Cases



Source: BMC Tumor Registry Database, Rocky Mountain Cancer Program, Delaware Cancer Registry, RMCDS software program (out-of-state residents included)

## COMPARISON REPORT BY AJCC STAGE BEEBE MEDICAL CENTER—TOP 5 SITES

Years 2009, 2010, 2011 (Analytical Cases)



Source: BMC Tumor Registry Database, Rocky Mountain Cancer Program; N/A represents no staging scheme; Unkn represents Dx only

## BEEBE MEDICAL CENTER CANCER REGISTRY FOLLOW-UP

Cases Diagnosed since reference date 2000 through June 2012

Total patients in registry since reference date	8,622
Less benign and borderline (except CNS > 2003)	5
Less carcinoma in situ cervix	10
Less all basal and squamous cell carcinoma of skin (except Stage III and IV before 2003)	10
Less foreign residents	10
Less patients over 100 years of age not contacted in 12 months	3
Less nonanalytic class of case	488
Less class of case 0 after 2005	245
Subtotal	7,851
Less number expired	3,413
Subtotal (number living)	4,438
Number living with current follow-up (within 15 months)	3,672
Patients lost to follow-up	766
<b>Percent of successful follow-up rate</b>	<b>90.2%</b>

Cases Diagnosed within 5 Years through June 2012

Total patients in registry for last 5 years	3,497
Less benign and borderline (except CNS > 2003)	1
Less carcinoma in situ cervix	1
Less all basal and squamous cell carcinoma of skin (except Stage III and IV before 2003)	1
Less foreign residents	0
Less patients over 100 years of age not contacted in 12 months	1
Less nonanalytic class of case	69
Less class of case 0 after 2005	185
Subtotal	3,239
Less number expired	945
Subtotal (number living)	2,294
Number living with current follow-up (within 15 months)	2,089
Patients lost to follow-up	205
<b>Percent of successful follow-up rate</b>	<b>93.7%</b>

Source: Beebe Medical Center, Tumor Registry, RMCDS database cancer program



## BEEBE MEDICAL CENTER 2011 CASE DISTRIBUTION (ALL SITES)

PRIMARY SITES	ANALYTIC CASES	CASE Mix %	GENDER		AJCC STAGE DISTRIBUTION						
			M	F	0	I	II	III	IV	N/A	X
<b>Breast</b>	130	18.5%	1	129	29	55	24	17	4	1	0
<b>Respiratory</b>	130	18.5%	73	57	0	23	15	28	62	0	2
Larynx	8	1.1%	7	1	0	3	1	2	2	0	0
Lung	119	16.9%	63	56	0	20	14	26	57	0	2
Pleura (Malig. Mesothelioma)	3	0.4%	3	0	0	0	0	0	3	0	0
Pyriiform Sinus	0	0.0%	0	0	0	0	0	0	0	0	0
<b>Digestive</b>	121	17.2%	63	58	7	25	22	28	37	2	0
Esophagus	8	1.1%	4	4	2	1	1	2	2	0	0
Stomach	5	0.7%	3	2	0	1	0	1	3	0	0
Small Intestine	4	0.6%	1	3	0	1	1	0	2	0	0
Other Biliary	5	0.7%	2	3	0	2	0	1	1	1	0
Colon	42	6.0%	20	22	4	6	8	14	10	0	0
Rectum/Rectosigmoid	14	2.0%	5	9	0	4	2	5	3	0	0
Anus/Anal Canal	6	0.9%	5	1	1	1	4	0	0	0	0
Liver/Gallbladder	10	1.4%	8	2	0	5	1	1	3	0	0
Pancreas	25	3.6%	14	11	0	3	5	4	13	0	0
Peritoneum	2	0.3%	1	1	0	1	0	0	0	1	0
<b>Male Organs</b>	92	13.1%	92	N/A	0	18	66	3	4	0	1
Prostate	91	12.9%	91	0	0	17	66	3	4	0	1
Penis	0	0.0%	0	0	0	0	0	0	0	0	0
Testis	1	0.1%	1	0	0	1	0	0	0	0	0
<b>Female Organs</b>	36	5.1%	N/A	36	0	20	6	4	5	0	1
Cervix Uteri	7	1.0%	0	7	0	2	3	1	1	0	0
Corpus Uteri	21	3.0%	0	21	0	17	2	0	1	0	1
Ovary	6	0.9%	0	6	0	0	1	2	3	0	0
Other Female (vulva)	2	0.3%	0	2	0	1	0	1	0	0	0
<b>Urinary</b>	54	7.7%	37	17	24	11	11	6	2	0	0
Bladder	40	5.7%	27	13	23	3	10	3	1	0	0
Kidney/Renal Pelvis	14	2.0%	10	4	1	8	1	3	1	0	0
<b>Lymphoma</b>	24	3.4%	14	10	0	6	2	2	14	0	0
Hodgkin's	1	0.1%	0	1	0	1	0	0	0	0	0
Non-Hodgkin	23	3.3%	14	9	0	5	2	2	14	0	0
<b>Multiple Myeloma</b>	19	2.7%	11	8	0	0	0	0	0	19	0
<b>Melanoma</b>	32	4.5%	18	14	3	20	3	3	3	0	0
<b>Head &amp; Neck</b>	14	2.0%	10	4	0	4	3	3	4	0	0
Tongue	4	0.6%	3	1	0	1	2	1	0	0	0
Parotid Gland/Salivary Gland	3	0.4%	1	2	0	2	0	0	1	0	0
Tonsil	1	0.1%	0	1	0	0	0	1	0	0	0
Nasopharynx/Hypopharynx	4	0.6%	4	0	0	0	1	1	2	0	0
Mouth & Gum	2	0.3%	2	0	0	1	0	0	1	0	0
<b>Leukemia</b>	10	1.4%	5	5	0	0	0	0	0	10	0
<b>Other Blood</b>	17	2.4%	6	11	0	0	0	0	0	17	0
<b>Thyroid</b>	5	0.7%	2	3	0	4	1	0	0	0	0
<b>Thymus</b>	1	0.1%	0	1	0	0	0	0	1	0	0
<b>Bone &amp; Connective Tissue</b>	5	0.7%	4	1	0	0	1	2	1	1	0
<b>Brain/CNS</b>	8	1.1%	3	5	0	0	0	0	0	8	0
<b>Merkel Cell</b>	2	0.3%	1	1	0	2	0	0	0	0	0
<b>All Other/Undefined/Unkn</b>	4	0.6%	2	2	0	0	0	0	0	0	4
<b>Total Analytic Cases</b>	704	100%	342	362	63	188	154	96	137	58	8
<b>Total Non-Analytic Cases</b>	50										
<b>Total Cases Abstracted</b>	754										

Note: N/A represents no staging scheme; X represents Dx only

# Quality Care for Our Cancer Patients

The mission of the Robert & Eolyne Tunnell Cancer Center at Beebe Medical Center is to provide hope and cure. From diagnosis through treatment and beyond, patients are never alone. Physicians, nurses, and staff are there to listen, support, and encourage.

## TUNNELL CANCER CENTER GRANTED A THREE-YEAR ACCREDITATION WITH COMMENDATION

In December 2011, The Commission on Cancer (CoC) of the American College of Surgeons again granted a Three-Year Accreditation with Commendation to the Tunnell Cancer Center. While it was the third time in a row that the Center gained the Commendation designation, the Center has over the years consistently received accreditation from the Commission on Cancer. Accreditation is given only to those facilities that have voluntarily committed to providing the highest level of quality cancer care and that agree to undergo a rigorous performance evaluation.

## TUNNELL CANCER CENTER PARTICIPATES IN THE QOPI® CERTIFICATION PROCESS

Tunnell Cancer Center's commitment to excellence also has been exemplified in its participation in The American Society of Clinical Oncology's (ASCO) Quality Oncology Practice Initiative (QOPI®). The program promotes excellence in cancer care by helping practices create a culture of self-examination and improvement. The lengthy certification process includes compliance with 17 standards of care and



*Chia-Chi Wang, DO, and James E. Spellman, Jr., MD*

a documentation procedure that can take more than a year to complete. As of the publication of this report, Tunnell Cancer Center had reached the QOPI certification-pending status.

## ADVANCED CANCER SURGERIES

Beebe Medical Center expanded the scope of complex cancer surgeries and procedures that is part of the multidisciplinary approach to cancer care. Fellowship-trained surgical oncologists, specially trained radiologists, obstetrician-gynecologists, and gastroenterologists perform the surgical procedures to treat cancers of the head and neck, digestive system, liver, pancreas, kidneys, lungs, and cutaneous tissue. Surgical teams also perform the specialized intraperitoneal therapy for ovarian cancer. Minimal invasive surgeries (MIS), when indicated, also are performed. They include: minimally invasive radioguided parathyroidectomy (MIRP); video assisted thoracic surgery (VATS); and laparoscopic colon/small bowel surgery.

## A SECOND LINEAR ACCELERATOR BEGINS OPERATION

A second linear accelerator radiation therapy system was put into operation this past year, allowing Tunnell Cancer Center to meet the community's growing need for cancer treatment. The system expands the available treatment options and allows for more patients to be treated.



*Beebe Medical Center physicians, surgeons, nurses, and other clinical specialists meet at the weekly Tumor Conference to discuss new cancer cases at the Tunnell Cancer Center.*



# News and Accomplishments

## TUNNELL CANCER CENTER AFFILIATES WITH NANTICOKE

Tunnell Cancer Center affiliated with Nanticoke Cancer Care Services in Seaford in 2012. This affiliation allows Beebe medical and radiation oncologists to treat patients at Nanticoke Cancer Care Services, keeping cancer care in Sussex County and keeping Nanticoke as a full-service cancer center.

## BREAST HEALTH CENTER

Beebe Medical Center established the Beebe Breast Health Center at the Beebe Health Campus. It is the only facility in the region devoted to breast care, diagnosis, and treatment. This comprehensive care is available to both men and women. Many patients receive a clean bill of health after diagnosis. For those requiring treatment, our breast health team is the gateway for specialized care at Tunnell Cancer Center. **Kathy Cook, MSN, RN**, became the Breast Health Center Nurse Navigator, assisting each patient to move swiftly through the process of receiving a diagnostic mammogram and workup to the appropriate next steps in the treatment process. The patient's experience is seamless under the guidance of the nurse navigator.

## OUTREACH EXPANDS

For the second year, Tunnell Cancer Center received a grant from the Philadelphia Affiliate of the Susan G. Komen for the Cure organization to fund breast cancer screening and educational efforts targeting Sussex County's minority, uninsured, and underserved populations. The Sharing Our Stories, Saving Our Sisters (SOS<sup>2</sup>) program uses professional cancer screening nurse navigators and lay health navigators to reach women who, through lack of health insurance, health knowledge, or other reasons, have traditionally not been diagnosed until the later stages of breast cancer.

Since this program was initiated in 2010, more than 4,573 women have been educated. Of those, 1,323 were navigated for screening and 285 had their mammograms funded by the Komen grant.

## NEW MEDICAL PROFESSIONAL POSITIONS

**Muhammad Siddique, MD, FACP**, a medical oncologist, joined Nanticoke Cancer Care Services. He is a graduate of Nishtar Medical College, Bahauddin Zakariya University, Pakistan. He completed an internship in Internal Medicine at Michigan State University and served as chief resident at the University of Illinois, Urbana-Champaign. Dr. Siddique completed his Hematology and Medical Oncology Fellowship at Michigan State University. He is Board Certified in Medical Oncology, Hematology, Internal Medicine, and Hospice & Palliative Medicine. He also has had several years of experience in the healthcare industry as a medical oncologist and hematologist. He is a Fellow of the American College of Physicians and a registered investigator with the National Cancer Institute. He has published research on ovarian cancer, breast cancer, and leukemia.



**Owen C. Thomas, MD**, joined Tunnell Cancer Center as a radiation oncologist. He is a graduate of University of Maryland School of Medicine, Baltimore. He completed an internship in internal medicine at Mercy Medical Center in Baltimore, and a residency in Radiation Oncology and Molecular Radiation Sciences at Johns Hopkins University School of Medicine. He was chief resident. He has published research on radiation oncology.



**Joy Snow, PharmD, BCPS**, joined Tunnell Cancer Center as Pharmacist-in-charge. She has a dual degree from Oregon Health and Sciences University and Oregon State University, Department of Pharmacy, and is Board Certified in Pharmacotherapy. She has worked as a pharmacist in a variety of settings since 2006 with a primary focus of oncology.



**Elizabeth Wilson, RN, BSN, OCN, MSN, FNP-BC**, became certified as a nurse practitioner in 2011. Liz has been a registered nurse at Tunnell Cancer Center for eight years. During that time, she earned her bachelor's and master's in nursing, and a certification as an oncology nurse.





## Telephone Directory

Medical Oncology . . . . .	(302) 645-3770
Radiation Oncology . . . . .	(302) 645-3775
Clinical Trials. . . . .	(302) 645-3100 (ext. 2635)
Integrative Health Programs . . . . .	(302) 645-3528
Nutrition Services. . . . .	(302) 645-3100 (ext. 2636)
Psychosocial Services . . . . .	(302) 645-3100 (ext. 2720)
Support Groups . . . . .	(302) 645-3087
Delaware Chapter of the Leukemia & Lymphoma Society . . . . .	(302) 661-7300
Cancer Support Community, Delaware . . . . .	(302) 645-9150
Cancer Care Coordinator . . . . .	(302) 645-3087
Breast Health Nurse Navigator . . . . .	(302) 645-3630



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**Tunnell  
Cancer  
Center**

For additional information about Tunnell Cancer Center, please visit our website, [beebemed.org](http://beebemed.org), and look under Patient Care Services for cancer care.

18947 John J. Williams Highway (Route 24)  
Rehoboth Beach, Delaware  
[www.beebemed.org](http://www.beebemed.org)