

#### About the Cover

Design elements of the Cancer Annual Report are based on the famous double helix model of the DNA molecule discovered by Watson and Crick in the mid-twentieth century combined with the universal pink ribbon symbol of breast cancer awareness.

#### December 30, 2009

We are pleased to present the 2009 Cancer Annual Report. This year's report includes a review of 2,953 breast cancer cases diagnosed at Woman's Hospital between 1998-2008. You will note that 30% of breast cancer cases were diagnosed in women less than 50 years old compared to 22% diagnosed in this age group nationally. This will be important for us to consider when reviewing and evaluating recommended changes for mammography screening.

In addition to reporting our cancer statistics, we have focused on the evolving understanding of the role that genetics plays in the development of cancer. Since the 1953 discovery of DNA structure by Watson and Crick and particularly with the completion of the human genome project in 2000, we have begun to understand the genetic language of cancer. Recent breakthroughs are allowing researchers to identify patients at increased risk for the development of cancer, to identify cancer earlier, and to design treatments that target the genetic errors in cancer cells. We hope, with this increasing knowledge, we will no longer view cancer as simply a life threatening disease, but as a group of disorders—often genetic in origin—amenable to new and more effective therapies.

Sincerely, David Boudreaux, MD Cancer Liaison Physician

Beverly Ogden, MD Chairman Cancer Committee

<image>

1953 Drs. James Watson and Francis Crick's discovery of the double helix structure of DNA is the historical milestone that leads to the development of the field of molecular biology.

#### The Inheritance of Cancer

All cancers have genetic basis, which means it takes a change (mutation) in a cell's genes/DNA to turn a normal cell into a cancer cell. Cancer is not a onestep process. Most human tumors result from a complex sequence of mutational events, each of which contributes to the breakdown of regulatory mechanisms that govern normal cell behavior. Although all cancers are genetic, only approximately 10% of cancers are believed to be inherited. Inherited cancer occurs when a patient is born with a genetic mistake that predisposes that person to develop cancer. As an inherited disorder, cancer is an autosomal dominant disease process. If a patient inherits a gene for cancer, that individual has approximately an 85% chance of developing cancer by the age of 65 and a 50% chance of passing this genetic predisposition on to offspring.

Questions about family history have long been a standard part of any history and physical. While only 10% of cancers have been proven to have a genetic component, many cases of inherited breast and ovarian cancer are linked to BRCA1 and BRCA2 gene mutations. BRCA1 mutations are associated with the risk of development of breast cancer, ovarian cancer, colon cancer, cervical cancer, uterine cancer, pancreatic cancer and prostate cancer in families. BRCA2 mutations are associated with the risk of development of breast cancer, ovarian cancer, male breast cancer, melanoma, pancreatic, stomach, gallbladder and bile duct cancer.

Prior to testing for such mutations, genetic counseling is essential, because the test results may affect not only the patient's life but the lives of an entire family for generations. After decades of aggressive educational campaigns by cancer societies, the message about the importance of family history and early detection has been heard-and heeded.

These days, requests for genetic testing from concerned patients increase every year. However, genetic testing isn't appropriate for all families. While testing for cancer genes has been available since the mid-1990s, only recently have medical professionals pinpointed who should be tested by reviewing the patient and family histories.

For nearly 15 years, Duane W. Superneau, MD, has counseled Woman's patients about whether such tests are truly warranted, interpreted screening results and helped those who have been found to have genetic cancer predisposition to understand their risks and manage their health.

# Guidelines used to determine an inherited predisposition to cancer include:

- Family history of two or more family members (on the same side of the family) with cancer;
- Families of Ashkenazic Jewish descent;
- Family history of early age onset cancer;
- Family history of bilateral breast cancer;
- Family history of more than one type of cancer; and,
- Family history of male breast cancer.

# Guidelines for the management of a family with an inherited risk for cancer:

A woman with an inherited risk of breast cancer may choose prophylactic mastectomy/oophorectomy or surveillance. A non-surgical management pathway includes six-month imaging of MRI alternating with mammography beginning at age 25, transvaginal ultrasound of the ovaries for early detection of ovarian lesions and also evaluation of CA 125 serum levels starting at age 25. Beginning between the ages of 20-30, colonoscopy screenings should be performed every one-two years and, subsequently, every year after age 40. Endometrial biopsies should be performed yearly beginning at age 35. Male family members should have increased and early PSA screenings and prostate exams.

# MRI and Breast Cancer

While mammography and breast ultrasound remain the main diagnostic imaging tools for evaluation of breast disease, Magnetic Resonance Imaging (MRI) has become a valuable third imaging modality for select patients. Woman's Hospital purchased an MRI scanner in early 2006, and has been a pioneer in the community for evaluation of breast cancer and MRI-guided breast core biopsies.

MRI of the breast is most commonly performed after the diagnosis of breast cancer. In approximately 20% of these patients, MRI will demonstrate more extensive spread of the cancer in the affected breast, and helps the surgeon plan accordingly. Also, in 5% of these cancer patients, MRI can detect an unknown cancer in the opposite breast. After surgery for breast cancer, scar tissue can often mimic a recurrent cancer, and MRI can often help distinguish between the two. Since 2006, over 1,600 breast MRIs have been performed at Woman's.

One of the limitations of mammography is the ability to demonstrate a cancer if the patient has dense underlying breast tissue. This is a very common situation in younger premenopausal women, and even in some postmenopausal patients. MRI imaging is not affected by breast tissue density. For this reason, MRI has become an ideal modality to screen patients at high risk for breast cancer. This includes women who have tested positive for a breast cancer gene, a very strong family history of breast cancer, or history of radiation therapy to the chest at a young age. Cancers diagnosed in high-risk patients by MRI are typically Stage 0 or 1 as compared to Stage 1 or 2 disease diagnosed by mammography.

Breast MRI is a very sensitive test, and on occasion normal tissue will mimic a mass and require biopsy. Roughly 15% of high-risk screening patients will have an abnormal MRI requiring biopsy, and two-thirds of these will be benign. This false positive result is one limitation of MRI. For this reason, MRI screening is not recommended for the general population.

Occasionally, a breast mass will be evident only on the MRI scan. In these patients, an MRI-guided biopsy is necessary. Woman's Imaging Department has one of the few MRI-compatible breast biopsy devices in the region. The addition of MRI to our hospital has brought us to the forefront in the battle of breast cancer diagnosis.



**FACT** There are different types of breast cancer, with different stages, aggressiveness and genetic makeup.

The 2009 Cancer Annual Report reflects a review of all breast cancer cases diagnosed at Woman's Hospital from 1998-2008. In 1998, 194 cases of breast cancer were diagnosed compared to 373 cases diagnosed in 2008 representing an almost two-fold increase. Approximately 30% of cases were diagnosed in women less than 50 years old compared to 22% diagnosed in this age group nationally. Also, 18% of cases were diagnosed at Stage 0, carcinoma in-situ, compared to 19% found in the National Cancer Data Base. Mastectomies were performed in 47% of Stage 0 cases, 42% of Stage I cases, 54% of Stage II cases, 84% of Stage III cases, and 48% of Stage IV cases.

As expected, 5-year survival data demonstrate better survival in Stage 0, I and II disease with 80%-89% survival in African-American women and 84%-95% survival in Caucasian women. A dramatic drop in survival is noted with Stage III disease, 57% for both African-American and Caucasian women. As expected the worst survival is seen with Stage IV disease, with 12% survival among African-American women and 29% survival among Caucasian women. Stage for stage there is a racial disparity in survival rates, except for Stage III disease. This has been a consistent finding in our annual reports and may reflect underlying intrinsic differences in the overall health of African-American women or other predisposing factors when compared to Caucasian women.



The following tables and graphs represent Woman's Hospital data for Breast Cancer cases for the years 1998-2008 with available comparative national and regional data.

Table I		Woma	n's Hospital	NCE	)B**
Breast Cases Age at Diagnosis:	Age at Diagnosis	Number	Percent	Number	Percent
Years 1998-2008	Pediatric		N/A	39	<1
Tearb 1990 2000	16-29	18	1	4,792	<1
	30-39	188	6	54,006	4
	40-49	688	23	224,320	18
	50-59	810	27	309,651	25
	60-69	613	21	269,668	22
	70-79	471	16	227,184	19
	80-89	147	5	118,555	10
	90-99	18	1	11,532	1
	Total	2,953	100	1,219,747	100
	**NCDB data only ava	ilable for years 20	000-2006.		
	Our local data fairly	closely paralle	el those of the Nationa	l Cancer Data Base (NC	DB), with

Our local data fairly closely parallel those of the National Cancer Data Base (NCDB), with peak incidence in the sixth decade and only rare cases diagnosed in the first three decades of life. The steep drop in incidence after the eighth decade most likely reflects the accelerated mortality from all causes in these elderly patients.

Table II	Woman's Hospital			NCDB**		
Breast Cases	Race	Number	Percent	Number	Percent	
Racial Incidence:						
Years 1998-2008	Caucasian	2,215	75	991,159	81	
	African American	717	24	117,472	10	
	Asian	15	<1	31,120	2	
	Other*	6	<1	79,996	7	
	Total	2,953	100	1,219,747	100	
	*Other category includ	les Native America	n and Hispanic			

\*\*NCDB data only available for years 2000-2006.

Some variation from NCDB data is noted in Woman's data for racial spread, but this most likely reflects a difference in the regional population mix compared with the national population as a whole.

**FACT** With best treatment, 10-year disease-free survival varies from 98% to 100%.

Table III Breast Cases Year of Diagnosis:	Year of Diagnosis *	Woman's Hospital Number of Breast Cancer Cases	Percer
Years 1998-2008	1998	194	<7
	1999	253	9
	2000	212	7
	2001	182	6
	2002	223	7
	2003	255	9
	2004	303	10
	2005	258	9
	2006	321	11
	2007	379	13
	2008	373	13
	Total	2,953	100

\* Year of diagnosis is based on accession year.

A slight apparent increase in the annual number of breast cases diagnosed over the past 11 years may reflect increasing awareness of breast cancer and its earlier diagnosis.

# Table IV Invasive Neoplasms

Breast Cases Histology: Years 1998-2008

Woman's	s Hospital	NC	OB*
Number	Percent	Number	Percent
2,080	87	815,294	67
178	7	108,958	9
119	5	74,243	6
22	1	221,252	18
2,399	100	1,219,747	100
	Number 2,080 178 119 22	2,080 87 178 7 119 5 22 1	NumberPercentNumber2,08087815,2941787108,958119574,243221221,252

#### Non-Invasive Neoplasms\*\*

	Woman's Hospital		NCDB*	
Cell Type	Number	Percent	Number	Percent
Ductal Carcinoma In-Situ	430	78	N/A	N/A
Lobular Carcinoma In-Situ	14	2	N/A	N/A
Mixed Ductal Carcinoma In-Situ				
and Lobular Carcinoma In-Situ	109	20	N/A	N/A
Phyllodes Tumor Borderline	1	<1	N/A	N/A
Total	554	100	N/A	N/A

\*\* Non-invasive neoplasms were not available for comparison in NCDB data.

\* NCDB data only available for years 2000-2006.

These data demonstrate that invasive ductal carcinomas greatly outnumber other forms of invasive cancer. This is also true of ductal carcinoma in-situ relative to other forms of in-situ cancer. Comparative NCDB data are only available for invasive tumors, and examination of these data suggest that a cancer is more likely to be classified by type at Woman's than is the case nationally.

Table V		Woman's	Hospital	NC	DB*
<b>Breast Cases</b>	Stage at Diagnosis	Number	Percent	Number	Perce
age at Diagnosis:	0	531	18	224,339	19
ears 1998-2008	1	1,103	37	463,180	38
	I	937	32	334,077	27
	IIA	651	22		
	IIB	286	10		
	III	248	9	98,357	ε
	IIIA	156	6		
	IIIB	64	2		
	IIIC	28	1		
	IV	39	1	40,277	3
	N/A/Unknown**	95	3	59,517	5
	Total	2,953	100	1,219,747	100

for all major stage groups.

	Wa	oman's Hospital			
Stage	Treatment First Course	Lumpectomies	Mastectomies	Number	Percent
0		<b>172</b> <sup>1</sup>	151	323	100
(	Surgery	20	108	128	40
0	Surgery/Chemotherapy	0	3	3	1
(	Surgery/Radiation	97	12	109	34
0	Surgery/Chemotherapy/Radiation	3	1	4	1
(	Surgery/Hormone	10	24	34	10
(	Surgery/Radiation/Hormone	42	1	43	13
	Surgery/Radiation/Chemotherapy/Hormone	0	2	2	1
I		<b>372</b> <sup>2</sup>	272	644	100
(	Surgery	19	124	143	22
0	Surgery/Chemotherapy	5	29	34	5
(	Surgery/Radiation	135	13	148	23
0	Surgery/Chemotherapy/Radiation	62	17	79	12
(	Surgery/Hormone	3	58	61	10
0	Surgery/Chemotherapy/Hormone	0	18	18	3
	Surgery/Radiation/Hormone	107	3	110	17
(	Surgery/Radiation/Chemotherapy/Hormone	41	10	51	8

1 For Stage 0 Lumpectomies surgery only patients, five patients refused radiation treatment, eight patients did not receive radiation treatment due to health complications and seven patients did not receive radiation treatment for reasons not otherwise specified.

2 For Stage I Lumpectomies surgery only patients, three patients refused radiation treatment, four patients did not receive radiation treatment due to health complications and twelve patients did not receive radiation treatment for reasons not otherwise specified.

Stage	Treatment First Course	man's Hospital Lumpectomies	Mastectomies	Number	Percent
П		<b>262</b> <sup>3</sup>	311	573	100
	Surgery	12	88	100	17
	Surgery/Chemotherapy	6	57	63	11
	Surgery/Radiation	36	15	51	9
	Surgery/Chemotherapy/Radiation	118	43	161	28
	Surgery/Hormone	0	29	29	5
	Surgery/Chemotherapy/Hormone	0	37	37	6
	Surgery/Radiation/Hormone	23	4	27	5
	Surgery/Radiation/Chemotherapy/Hormone	66	38	104	18
	Radiation/Chemotherapy	1	0	1	1
Ш		<b>26</b> <sup>4</sup>	133	159	100
	Surgery	4	19	23	14
	Surgery/Chemotherapy	0	14	14	9
	Surgery/Radiation	2	12	14	9
	Surgery/Chemotherapy/Radiation	12	52	64	40
	Surgery/Hormone	0	3	3	2
	Surgery/Chemotherapy/Hormone	0	1	1	1
	Surgery/Radiation/Hormone	2	3	5	3
	Surgery/Radiation/Chemotherapy/Hormone	5	29	34	21
	Chemotherapy	1	0	1	1

3 For Stage II Lumpectomies surgery only patients, six patients refused radiation treatment and six patients did not receive radiation treatment for reasons not otherwise specified.

4 For Stage III Lumpectomies surgery only patients, three patients did not receive radiation treatment due to health complications and one patient did not receive radiation treatment for reasons not otherwise specified.

1986 The first tumor suppressor gene (retinoblastoma gene) is found to be associated with an inherited form of cancer
8 MAXAMMANAN of the eye in children, proving defective inherited genes may lead to the development of cancer.



Stage	Treatment First Course	Lumpectomies	Mastectomies	Number	Percer
IV		14 <sup>5</sup>	13	27	100
	Surgery	3	2	5	19
	Surgery/Chemotherapy	1	4	5	19
	Surgery/Chemotherapy/Radiation	2	5	7	26
	Surgery/Chemotherapy/Hormone	0	1	1	<4
	Surgery/Radiation/Hormone	1	0	1	<4
	Surgery/Radiation/Chemotherapy/Hormone	0	1	1	<4
	Hormone	1	0	1	<4
	Chemotherapy	3	0	3	11
	Radiation/Chemotherapy	1	0	1	<4
	None	2	0	2	7
N/A U	nknown	14 <sup>6</sup>	14	28	100
	Surgery	4	6	10	36
	Surgery/Chemotherapy	2	1	3	11
	Surgery/Radiation	3	4	7	25
	Surgery/Chemotherapy/Radiation	0	1	1	<4
	Surgery/Hormone	1	0	1	<4
	Surgery/Chemotherapy/Hormone	0	1	1	<4
	Surgery/Radiation/Hormone	3	1	4	14
	Chemotherapy	1	0	1	<4

5 For Stage IV Lumpectomies surgery only patients, three patients did not receive radiation treatment for reasons not otherwise specified.

6 For N/A or Unknown stage Lumpectomies surgery only patients, four patients did not receive radiation treatment for reasons not otherwise specified.

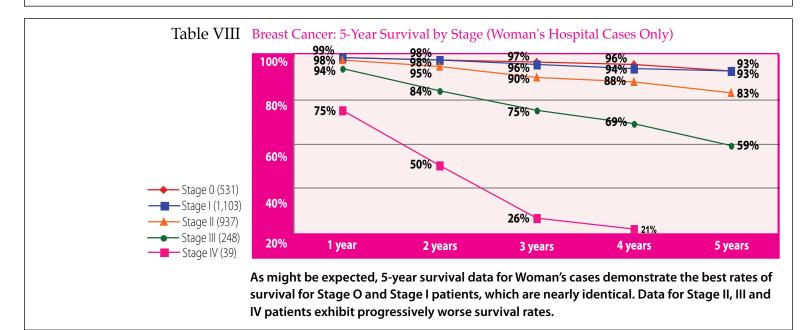
These data display first course of treatment modalities for all stages of breast cancer at Woman's, also segregating patients who have had lumpectomies versus mastectomies for comparison.

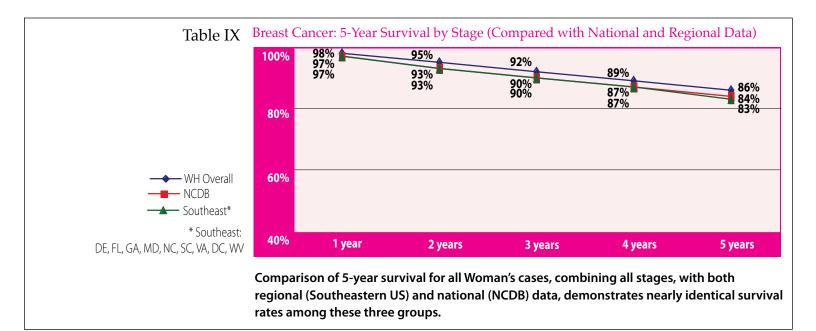


Table VII • Breast Cases • NCDB Comparison • First Course of Treatment: Years 2000-2006						
		Woman's H	lospital		NC	DB*
Treatment	Lumpectomies	Mastectomies	All Cases	Percent	Cases	Percent
Surgery	62	347	409	23	318,196	26
Surgery/Radiation	273	56	329	19	144,230	12
Surgery/Chemotherapy	14	108	122	7	105,557	9
Surgery/Radiation/Chemotherapy	197	119	316	18	116,003	9
Surgery/Radiation/Hormone	178	12	190	11	165,235	14
Surgery/Hormone	14	114	128	7	86,003	7
Surgery/Radiation/Chemotherapy/Hormone	e 112	80	192	11	84,765	7
Surgery/Chemotherapy/Hormone	0	58	58	3	38,343	3
Other Specified Therapy	8	0	8	>1	110,207	9
None	2	0	2	>1	51,208	4
TOTAL	860	894	1,754	100	1,219,747	100

\* NCDB data only available for years 2000-2006.

This table permits comparison of our first course of treatment modalities with national data. This required all stages be grouped together by treatment modality, and our local percentages roughly parallel national percentages. Differences, however, do exist. Locally, breast cancer patients are somewhat less likely to have surgery only and more likely to undergo surgery with radiation therapy and/or chemotherapy than reported nationally.



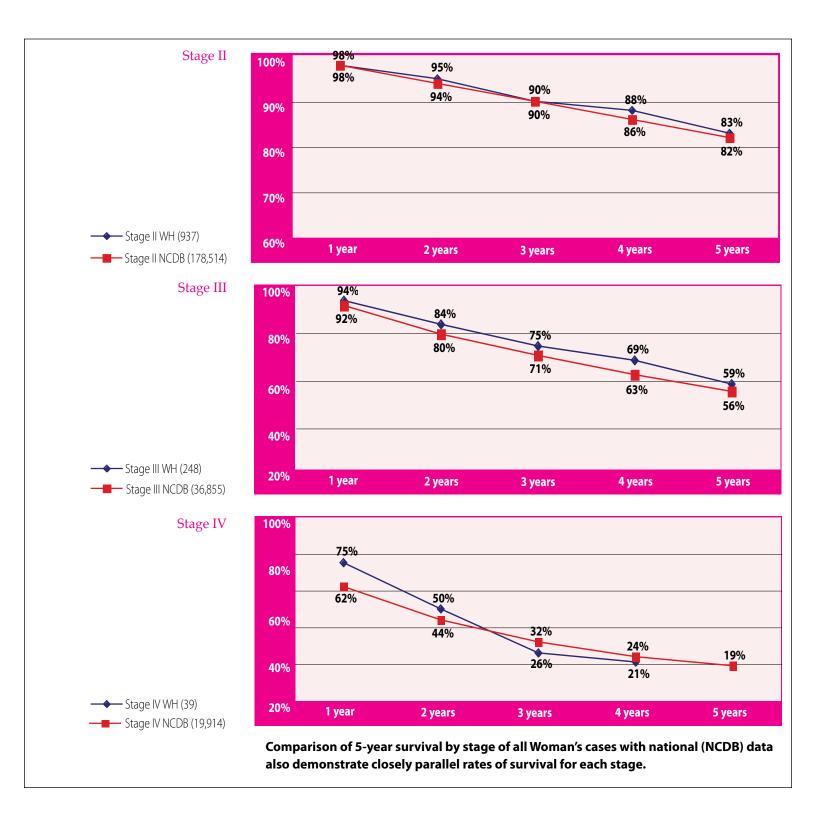


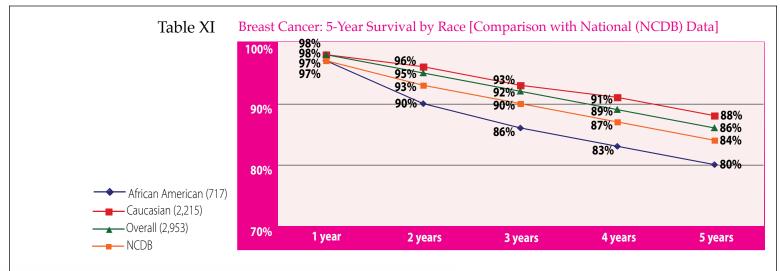


**1989** Michael Bishop and Harold Varmus are awarded the Nobel Prize in Medicine for a 1976 discovery that viruses contain a cancer-causing gene (oncogene) derived from the genes of the organisms they infect.



**FACT** According to the Merck Manual, more than 80% of breast cancer cases initially come to medical attention when a woman feels a lump.





Comparison of 5-year survival by race at Woman's with national (NCDB) data demonstrates that our Caucasian population have uniformly better survival rates than seen nationally, but also substantially better survival rates than the Woman's African-American population. The reasons for these racial differences have not been determined, but data do not suggest delay in diagnosis as a cause.

This racial difference among Woman's patients was also noted to varying degrees in each stage group. Also, essentially no difference in survival based solely on age was noted.

1990 Dr. Mary-Claire King discovers a single gene on chromosome 17 (BRCA1) is responsible for many cases of inherited breast and ovarian cancer. Under the leadership of Dr. James Watson, the Human Genome project begins; its goal is to identify the genetic makeup of the human species. MIXMANNAN 13

# Continuing Medical Education

Woman's Hospital is accredited by the Louisiana State Medical Society to provide continuing medical education for physicians. The mission of the hospital's continuing medical education program is to offer appropriate programs related to the healthcare of women, children and infants.

As part of continuing medical education, Mark Newman, MD, presented *Adnexal Masses in Pregnancy* on Tuesday, July 1, 2008, at Woman's Hospital.

#### Food and Nutrition Services

Registered dietitians ensure patients receive adequate nutrition. The education of patients involves stressing the importance of eating properly and developing a nutritional care plan. The plan provides patients with coping strategies to deal with the possible side effects of their treatments.

Room service is a concept most women equate with a high-end hotel, not a hospital. However, in 2004, Woman's initiated a pilot room service plan on the oncology unit. The innovative program allows patients to order meals when they are hungry rather than delivering trays at pre-determined times. By 2005, this program—the first of its kind in area hospitals—was expanded to include all units. While patient satisfaction with the quality of food served at Woman's has always been high, this pilot program brought the food service satisfaction rating to 99%.

# Gynecologic Oncology Services

Woman's provides inpatient and outpatient diagnostic services, surgery, chemotherapy administration, symptom management and supportive care for women with a diagnosis of gynecologic cancer. *Womanto-Woman*, a monthly support group, provides educational seminars and a means of sharing information about local resources, local support groups and reliable websites. Two educational programs are held each year for cancer survivors and their families: *Celebrate Life* in the spring and *Women Living with Cancer* in the fall.

# Gynecologic Oncology Group (GOG)

Woman's is one of four institutions in Louisiana that participates in the Gynecologic Oncology Group (GOG). The GOG is a national collaborative group funded by the federal government through the National Cancer Institute (NCI). GOG is the only group that focuses its research on women with pelvic malignancies, such as cancer of the ovary, uterus and cervix.

A group of leading oncologists founded the GOG in 1970. They believed a nationwide cooperative effort by a variety of specialists would allow for a more rapid accumulation of information concerning treatment for gynecologic cancer. The GOG designs and implements clinical trials in all aspects of gynecologic cancer. These research studies compare the best existing treatments with promising new ones. GOG continues to pave the way in gynecologic oncology trials, setting the standard for cancer research and treatment.

The GOG program at Woman's was initiated in 1988. Gynecologic Oncologist Giles Fort, MD, directs the gynecologic oncology research program at Woman's, which is affiliated with the GOG through Wake Forest University School of Medicine in Winston-Salem, N.C. Through this affiliation, Woman's participates in GOG protocols and registers patients in clinical trials, giving women access to the latest treatments. All of our gynecologic oncology patients have access to presentations at the multidisciplinary Gynecologic Tumor Conference, genetic counseling and participation in national trials.

The oncology data manager, a registered nurse at Woman's, works with the gynecologic oncologists at Woman's and with GOG to provide the best possible treatment for patients. The oncology data manager registers patients on GOG clinical trials to assure the staff adheres to the criteria involved in the research protocol. A nurse phones each gynecologic oncology patient (even those not participating in a research protocol) within seven to 10 days after chemotherapy administration. The nurse reviews potential side effects, offers emotional support, answers questions approved by the physicians, continues education program initiated during the initial chemotherapy visit and may refer the patient with complex issues to a physician, social worker or dietitian. The purpose of this follow-up is to minimize side effects, continue teaching and reinforce the hospital's commitment to the patient's well-being.

In 2008, the oncology data manager made 558 calls to patients. Subsequently, 74 patients were referred to their physician, and four were referred to social services. Below is a summary of participation in GOG studies for 2008:

- 1 patient was registered on GOG treatment protocol;
- 181 patients were reviewed for GOG protocols;
- 163 patients were ineligible for GOG treatment protocols;
- 23 patients were registered on GOG non-treatment protocols;
- 10 GOG protocols were approved by the Institutional Review Board;
- 31 patients are being actively followed on GOG studies.

**FACT** According to the American Cancer Society, the first medical sign—or objective indication of breast cancer as detected by a physician—is discovered by mammogram.

### **Imaging Services**

The imaging services department offers general diagnostic radiology and fluoroscopy imaging, ultrasound examinations, nuclear medicine, Computed Tomography (CT), and Magnetic Resonance Imaging (MRI) for both inpatients and outpatients.

A staff of board-certified radiologists, registered nurses, technologists and support staff provide a supportive atmosphere for patients in all imaging services.

Our breast imaging services staff provides screening and diagnostic mammography, needle localization, galactography, and cyst aspiration, as well as stereotatic, ultrasound-guided and MRI-guided breast core biopsy. All mammography studies are read by two board-certified radiologists and Computer-Assisted Detection (CAD) as well, providing triple review for all mammography studies.

Woman's also provides digital screening mammography services using a state-ofthe-art mobile mammography coach. Our mobile program, which provided screening mammography for 5,800 patients last year in 15 surrounding parishes, is built on a collaborative partnership which enables us to provide breast care to low-income, at-risk, uninsured and underinsured women in outlying areas. Our collaborative partners include Mary Bird Perkins CARE Network, YWCA, Encore plus, LSU Health Care System, Louisiana Breast and Cervical Health Program and Susan G. Komen Foundation. The mobile program identified 25 cancers last year among women whose cancers may not have otherwise been detected

# Pathology/Laboratory

Pathology/Laboratory offers anatomic pathology, bacteriology/serology/virology, blood transfusions, clinical chemistry, cytogenetics, cytology, hematology/ coagulation/urinalysis and special chemistry. These services include testing that is related to cancer diagnoses and monitoring, such as CA-125, AFP, B-HCG, and Her2/neu FISH and Urovysion FISH. The laboratory is under the direction of board-certified pathologists and is inspected and accredited by the College of American Pathologists.

#### Cancer Detection Laboratory

The concept of Pap smears as a means of detecting precancerous lesions was in its infancy when Cary Dougherty, MD, founded the Cancer Detection Laboratory (CDL) in 1958. In the 50 years since, more than 1 million Pap smears have been processed at Woman's, and the CDL has received recognition for its quality assurance practices, which exceed all regulation standards.

The CDL is one of the nation's oldest cytology laboratories. During the first two years of its operations, 4,732 Pap smears were processed. Today, more than 90,000 cases per year are processed. The fees charged during the early days of the CDL were used to pay the \$64,000 purchase price for the land on which Woman's Hospital was built.

Directed by a pathologist board certified in cytopathology and staffed by certified experienced cytotechnologists, CDL performs cytological and histological correlations on abnormal Pap smears and participates in nationally recognized proficiency surveys. The lab adheres to the workload standards set by the American Society of Cytology. The lab has also passed inspection by and met the accreditation requirements of the College of American Pathologists.

#### Pharmacy

The pharmacy department follows the mission of the American Society of Health-System Pharmacists by helping to ensure the best use of medications. Pharmacy services include dispensing oral and intravenous medications, chemotherapy and drugs used in clinical trials. The pharmacy also provides drug information services.

For patient safety, one pharmacist reviews each chemotherapy order for accuracy by comparing it with current dosing recommendations in medical literature or the protocol's dosing regimen for research study patients. A second pharmacist checks the drug order information entered in the patient's medication profile and verifies the correct drug and dose have been selected prior to preparation.

#### **Respiratory Care**

Respiratory care provides diagnostic and therapeutic services to both inpatients and outpatients. Respiratory care practitioners collaborate with physicians and nurses to maintain physiological homeostasis of the patient. Under the direction of a physician, therapists evaluate, treat and care for patients with breathing disorders. Respiratory care practitioners are a vital part of the hospital's lifesaving response team with current Louisiana RCP licensure, BCLS, PALS, NRP and ACLS certifications.

#### Social Services

Social workers provide emotional support for patients and their families. They discuss the patient's feelings toward her diagnosis and integrate this information into the treatment plan. The department also helps coordinate any services the patient needs during recovery and links the patient and her family with the hospital's support groups and community services.

# Surgical Services

The staff of surgical services specializes in oncologic, reconstructive plastic, breast, general, gynecologic and urogynecologic surgery and minimally invasive endoscopic surgical procedures. In November 2007, Woman's added the daVinci® robotic system to its surgical repertoire. Robotic surgery is a minimally invasive technique that reduces recovery time associated with hysterectomies and other gynecological surgeries.

The day surgery staff preoperatively cares for ambulatory surgery patients and inpatients in private rooms. After surgery, ambulatory surgery patients recover in their preoperative room, and inpatients are admitted to a private room on a nursing unit. In addition, critical care professionals staff the adult intensive care unit (AICU) 24 hours a day/7days a week. To ensure post-surgical patients receive adequate pain control, board-certified anesthesiologists remain in the hospital 24 hours a day to provide pain management and anesthesia care.

# **Therapy Services**

Therapy services at Woman's Center for Wellness offer patients a broad spectrum of treatments. Patients who are on extended bed rest may require physical and occupational therapies to become as independent as possible in daily activities. Physical or occupational therapists evaluate each patient's level of physical activity and prescribe exercises to maintain or increase functional ability. Woman's also offers a comprehensive lymphedema management program, including exercise, education, manual lymphatic techniques, compression bandaging and use of a gradient sequential pump. The lymphedema management program educates patients about prevention and treatment options.

Outpatient services are available for patients who need ongoing rehabilitation after breast or abdominal surgery or for generalized weakness after prolonged illness. The Forward Motion program was established in 2003 to help these women successfully transition from therapy to independent exercise and bridges the gap for patients who are discharged from physical therapy and need support to maintain a therapy program. Therapists guide Forward Motion patients through individualized exercise programs that incorporate different wellness components, such as flexibility, strength, endurance, body composition and cardiovascular and stress management.

In 2006, elements of the Forward Motion program were incorporated into a program to help cancer patients maintain their strength. The Cancer Health and Fitness program is designed for patients who are receiving treatment as well as for those who want to start exercising but who need guidance in determining a safe level of physical exertion. This program combines therapy, Forward Motion techniques and independent exercise to help improve overall fitness by increasing strength and endurance, reducing pain and improving function.

#### Woman's Center for Wellness

Our center can be considered a place of refuge offering wellness services for the entire spectrum of health. The Fitness Club staff develops an individualized program to meet each member's unique health needs. The club creates classes and programs for the mind, body and spirit. Many educational offerings are available to members and the general public. These programs are focused on restoration of better health through stress reduction, nutrition, strength and flexibility and improved balance. Nutrition plays an integral role in healing, disease prevention and treatment. Women throughout the city are invited to participate in a variety of nutrition offerings-consultations, cooking classes, grocery tours and support groups. Located within Woman's Center for Wellness, our spa offers soothing treatments, including massages and facials. All of these services and programs aid in health maintenance as well as healing.



1994 Woman's opens the Woman's Health Research Institute and Molecular Biology Laboratory with funding of \$250,000 raised by the Baton Rouge community and starts a collaborative study with
16 MMMMMMMM Dr. Mary-Claire King to investigate inherited breast cancer in Louisiana.

# Development

Philanthropic giving allows individuals, corporations and private foundations to invest in organizations like Woman's and other non-profits that meet critical community needs. The office of development remains committed to helping donors make a difference. Its mission is "to raise funds to support the mission of the Hospital by building long-term relationships between the Hospital and the community through communication, education, and stewardship."

Woman's is focused on building a comprehensive development program consisting of an annual giving program, a major gifts program, a capital campaign, and a planned giving program. The following events were part of our 2008 annual giving program:

#### Tenth Annual Woman's Victory Open

The Woman's Victory Open is an exciting all-women's golf tournament that supports breast cancer outreach and education. Woman's Victory Open is the premier women's charity golf event in Louisiana. The 10th annual Woman's Victory Open golf tournament, presented by Capital One and Saia Electric, netted \$135,000. Since its inception, funds raised have exceeded \$700,000, helping to support the mobile outreach program provided by Woman's Mobile Mammography Coach, which helps educate women in the community about early detection and offers screenings for women who need it most.

#### **Ninth Annual Tour of Ponds**

The Ninth Annual Tour of Ponds, held on May 31 and June 1, 2008, showcased more than 25 private water gardens in the Greater Baton Rouge area. Since its inception in 1999, the Tour of Ponds has raised more than \$63,000 to benefit the breast and gynecologic cancer programs of Woman's. Tour of Ponds organizer and Harb's Oasis owner, Charbel Harb, presented a check in the amount of \$9,600 representing the proceeds from the event.

#### Second Annual Rock-N-CHAIRity

Rock-N-CHAIRity is a unique fundraising event hosted by Woman's Circle of Friends. It includes great food, fun and an auction featuring one-of-a-kind chairs created by artists from the community. The 2008 event netted over \$50,000 for the Community Care Fund, which was established to provide vital healthcare services and programs for local women and infants, including programs such as the neuro-developmental clinic for infants, care for sexual assault victims and prenatal education.



# Woman's Health Research Department

Founded in 1994, Woman's Health Research Department provides clinical and molecular biology/genetic research services for the hospital. The goal of research at Woman's is to promote women and infants' health research, while enhancing medical care and improving patient outcomes. The research staff provides technical and administrative support to Woman's staff who conduct research. The Department has two divisions:

#### I. Clinical Division:

The clinical division conducts research related to polycystic ovarian disease, metabolic syndrome and insulin resistance. This division coordinates hospital studies, such as those involving fertility and reproductive hormones, maternalfetal medicine, neonatal medicine, investigational medications, physical therapy, exercise and administrative and social issues.

#### II. Molecular Biology/ Genetics/ Oncology Division

The molecular biology/genetics/oncology division conducts translational cancer research studies including looking at inherited cancer and tumor markers. This division coordinates hospital studies involving gynecologic oncology, surgical treatment of breast cancer, genetics and molecular biology.

The molecular biology laboratory utilizes advanced technology for mutation detection, allowing the research team to perform clinically relevant genetic research. The pathology laboratory works closely with the research team to perform many of these studies.

In 2008, the Woman's Health Research Department had 49 active research studies, 39 of which were cancer-related studies. The following four studies are related to breast cancer diagnosis or treatment:

- A. Molecular Investigation of Breast and Ovarian Tumor Tissue (a study in collaboration with Dr. Mary-Claire King, University of Washington in Seattle);
- B. Molecular Analysis of Human Breast Cancer (a study in collaboration with Dr. Mary-Claire King);
- C. Prognostic Study of Sentinel Node and Bone Marrow Metastasis in Women with Clinical T1 or T2 and N0M0 Breast Cancer; and,
- D. Quantitative Immunoperoxidase Analysis of LH and GnRH Receptor Status in Cancer of the Breast, Endometrium and Ovary.



#### **Physician Members**

Chair, Pathologist	Beverly Ogden, MD
Vice-Chair and Cancer Liaison Physician, Surgeon	David Boudreaux, MD
Medical Oncologist	Bryan Bienvenu, MD
Medical Oncologist	Deborah Abernathy, MD
Radiologist	James Ruiz, MD
Radiation Oncologist	Maurice King, Jr., MD
Radiation Oncologist	Will Russell, MD
Ob/Gyn	Jane Peek, MD
Ob/Gyn	Julius Mullins, MD
Gyn Oncologist	Giles Fort, MD
Gyn Oncologist (MEC Liaison)	Sterling Sightler, MD
Surgeon	Michael Hailey, MD

#### **Administrative Liaisons**

Senior Vice President/CNE, Nursing Services <b>Tricia Johnson, RN, MN, CNAA</b>
Senior Vice President, Medical Staff Services Nancy Crawford, RHIA
Senior Vice President, Operations Jamie Haeuser, MHA
Director, Health Information Management Danielle Berthelot, RHIA
Manager, Health Information Management
Cancer Registrar
Cancer Registrar
Director, Quality/UM
Oncology Social Worker
Director, Gyn/Onc
Manager, Breast Center
Data Manager/Oncology
Clinical Dietitian
Director, Pharmacy
Director, Corporate Communications

#### The Cancer Committee shall:

- develop and evaluate the annual goals and objectives for the clinical, educational, and programmatic activities related to cancer;
- promote a coordinated, multidisciplinary approach to patient management;
- ensure that educational and consultative cancer conferences cover all major sites and related issues;
- ensure that an active supportive care system is in place for patients, families, and staff;
- monitor quality management and improvement through completion of quality management studies that focus on quality, access to care, and outcomes; promote clinical research;
- supervise the cancer registry and ensure accurate and timely abstracting, staging, and follow-up reporting;
- encourage data usage and regular reporting;
- ensure content of the annual report meets requirements;
- perform quality control of registry data; and
- publish the annual report by the end of the fourth quarter of the following year.

The Cancer Registry Program of Woman's is a medical data collection system of patients diagnosed with cancer and/or receiving cancer treatment at the hospital. Cancer cases are abstracted and reported to the Louisiana State Tumor Registry in accordance with state and federal guidelines. The information gathered by the registry is used for presentation in the Cancer Annual Report as well as in other specialty reports.

Within the Cancer Registry, coordination of the hospital's compliance with standards of the American College of Surgeons' Commission on Cancer (CoC) takes place to maintain accreditation. To meet and maintain approval through the CoC, a facility must undergo a rigorous evaluation and review of its performance in many areas of the facility's cancer program. This review is performed onsite every three years. On May 19, 2008, Woman's was surveyed by the CoC and currently maintains full accreditation with commendation. Approved cancer programs are encouraged to improve their quality of patient care through various cancerrelated programs. These programs focus on a full range of medical services involved in the diagnosis and treatment of cancer including: prevention, early diagnosis, pretreatment evaluation, staging, optimal treatment, psychosocial support and care at the end of life.

The reference date for the Cancer Registry is January 1, 1991. The total number of cases in the database is 7,151 with 6,623 cases being analytical and 528 cases being non-analytical. The Cancer Registry at Woman's accessioned 587 new cases during 2008. Of the newly accessioned cases, all were analytical. These numbers include in-situ cancers of the breast, cervix, vagina and vulva.

The cancer program coordinator and cancer program abstractors identify all cancer cases according to established state and federal guidelines. These individuals work directly with the medical staff, nursing and other allied health professionals within the Baton Rouge area as well as personnel of the Baton Rouge Regional Tumor Registry, Louisiana State Tumor Registry and tumor registrars across the country to gain access to information in abstracting and completing all pertinent cancer cases. To stay abreast of the most recent changes in the field of cancer registry, the staff attends educational conferences at the local and national levels. In 2008, staff members attended LCRA state meetings in New Orleans and Baton Rouge. The Cancer Registry Manager also attended the NCRA convention held in Minneapolis, MN, in April 2008.

The cancer program coordinator at Woman's is a Certified Tumor Registrar (CTR) and a Registered Health Information Technician (RHIT). She is a member of the American Health Information Management Association (AHIMA). The cancer program abstractor is also a CTR. A Registered Health Information Administrator (RHIA), who is also a Certified Professional Coder (CPC), manages the department. She is also a member of the AHIMA and of the American Academy of Professional Coders (AAPC). All three are members of the National Cancer Registrars Association (NCRA) and the Louisiana Cancer Registrars Association (LCRA), and the Region II Cancer Registrar Forum.

2000 The Human Genome Project is completed after identifying approximately 30,000 human genes and discovering that 95% of the human genome is made of "junk" DNA. Interestingly, the project costs approximately \$3 billion—roughly
20 MMMMMMMM equivalent to the 3 billion base pairs in the human genome.

Age at Diagnosis	Number of Cases	Percent
20-29	2	<1
30-39	17	5
40-49	76	20
50-59	88	24
60-69	98	26
70-79	67	18
80-89	23	6
90-99	2	<1
Race	Number of Cases	Percent
Caucasian	276	74
African American	95	25
Asian/Other	2	<1

Cancer of the Breast 373 Analytic Cases 2008

Stage at Diagnosis	Number of Cases	Percent
Stage 0	76	20
Stage I	153	41
Stage II	103	28
Stage III	39	10
Stage IV	1	<1
Unknown/Not Applicable	1	<1

Treatment First Course	Number of Cases	Percent
Surgery	116	31
Surgery/Chemotherapy	37	10
Surgery/Radiation	45	12
Surgery/Radiation/Chemotherapy	38	10
Surgery/Hormone	32	9
Surgery/Radiation/Hormone	79	21
Surgery/Chemotherapy/Hormone	8	2
Surgery/Radiation/Chemotherapy/Ho	ormone 18	5

Histology	Number of Cases	Percent
Infiltrating Ductal Carcinoma	251	67
Ductal Carcinoma In-Situ	27	7
Lobular Carcinoma In-Situ	2	<1
Lobular Carcinoma	28	8
Ductal & Lobular Carcinoma In-Situ	48	13
Infiltrating Ductal & Lobular Carcinom	na 8	2
Mucinous Adenocarcinoma	5	1
Metaplastic Carcinoma NOS	1	<1
Infiltrating Ductal Carcinoma		
with Paget's Disease	1	<1
Phyllodes Tumor	2	<1

# Cancer of the Uterus 79 Analytic Cases 2008

Age at Diagnosis	Number of Cases	Percent
20-29 30-39 40-49 50-59 60-69 70-79 80-89 90-99	0 2 3 32 19 17 6 0	0 <3 <4 41 24 22 8 0
Race	Number of Cases	Percent
Caucasian African American Asian/Other	61 18 0	77 23 0
Stage at Diagnosis	Number of Cases	Percent
Stage 0 Stage I Stage II Stage III Stage IV Unknown/Not Applicable	0 55 2 12 5 5	0 70 3 15 6 6
Treatment First Course	Number of Cases	Percent
Surgery Surgery/Radiation Surgery/Chemotherapy Surgery/Radiation/Chemotherapy	54 10 12 3	68 13 15 4
Histology	Number of Cases	Percent
Endometrioid Adenocarcinoma Mixed Cell Adenocarcinoma Adenocarcinoma, NOS Endometrial Stromal Sarcoma Carcinosarcoma Serous Adenocarcinoma Adenosquamous Carcinoma Small Cell Carcinoma Clear Cell Adenocarcinoma	44 1 15 1 6 5 1 1 1 2	56 <2 15 <2 3 <2 <2 <2 <2 <2 3

1

1

1

<2

<2

<2

Mucinous Adenocarcinoma

Adenosarcoma

Mixed Type Rhabdomyosarcoma

Number of Cases	Percent
3	7
4	9
10	22
15	33
9	20
4	9
	3 4 10 15

Race	Number of Cases	Percent
Caucasian	39	87
African American	6	13
Asian/Other	0	0

Stage at Diagnosis	Number of Cases	Percent
Stage I	12	27
Stage II	5	11
Stage III	21	47
Stage IV	2	4
Unknown /Not Applicable	5	11

Treatment First Course	Number of Cases	Percent
Surgery/Chemotherapy	33	73
Surgery	10	22
Surgery/Chemotherapy/Hormon	e Therapy 1	<3
None	1	<3

Histology	Number of Cases	Percent
Serous Cystadenocarcinoma, NOS	26	58
Endometrioid Adenocarcinoma	2	4
Adenocarcinoma	5	11
Granulosa Cell Tumor	5	11
Mucinous Cystadenocarcinoma	2	4
Carcinoid Tumor, NOS	1	<3
Signet Ring Cell Carcinoma	1	<3
Carcinoma, NOS	1	<3
Epithelioid Leiomyosarcoma	1	<3
Mullerian Mixed Tumor	1	<3

Cancer of the Ovary 45 Analytic Cases 2008

# Cancer of the Cervix 44 Analytic Cases 2008

Age at Diagnosis	Number of Cases	Percent
20-29	4	9
30-39	9	<21
40-49	9	<21
50-59	10	23
60-69	7	16
70-79	5	11
80-89	0	0
Race	Number of Cases	Percent
Caucasian	35	80
African American	9	<21

Asian/Other	0	0
Stage at Diagnosis	Number of Cases	Percent
Stage 0	10	23
Stage I	22	50
Stage II	3	7
Stage III	5	11
Stage IV	1	2
Unknown/Not Applicable	3	7

Treatment First Course	Number of Cases	Percent
Surgery	31	71
Radiation	1	2
Surgery/Radiation/Chemotherapy	4	9
Radiation/Chemotherapy	2	5
Surgery/Radiation	5	11
Surgery/Chemotherapy	0	0
None	1	2

Histology	Number of Cases	Percent
Squamous Cell Carcinoma	22	50
Adenocarcinoma, NOS	9	21
Squamous Cell Carcinoma, Microinvas	ive 1	2
Clear Cell Adenocarcinoma	1	2
Squamous Cell Carcinoma In-Situ	8	18
Adenocarcinoma In-Situ	2	5
Leiomyosarcoma, NOS	1	2

Site	Number of Cases	Percent
Vulva	19	76
Vagina	6	24
-		
Age at Diagnosis	Number of Cases	Percent
30-39	1	4
40-49	3	12
50-59	7	28
60-69	5	20
70-79	5	20
80-89	4	16
Race	Number of Cases	Percent
Caucasian	23	92
African American	2	8

Stage at Diagnosis	Number of Cases	Percent
Stage 0	8	32
Stage I	9	36
Stage II	7	28
Stage III	1	4
Stage IV	0	0
Unknown/Not Applicable	0	0

Asian/Other

0

0

Treatment First Course	Number of Cases	Percent
None	1	4
Surgery	21	84
Surgery/Chemotherapy	0	0
Surgery/Radiation/Chemotherapy	1	4
Radiation/Chemotherapy	1	4
Radiation	0	0
Chemotherapy	1	4

Histology	Number of Cases	Percent
Squamous Cell Carcinoma	13	52
Squamous Cell Carcinoma In-Situ	8	32
Squamous Cell Carcinoma, Microinva	sive 2	8
Adenocarcinoma	1	4
Malignant Melanoma	1	4

Cancer of the Vulva and Vagina 25 Analytic Cases 2008

# 2008 Tumor Report Site Distribution Analytic Cases Only

Group	Analytic	Stage 0	Stage I	Stage II	Stage III	Stage IV	Not Applicable
All sites	587	96	255	122	81	11	18
Breast	373	76	153	103	39	1	1
Corpus Uteri/Uterus NO <mark>S</mark>	79	0	55	2	12	5	5
Ovary	45	0	12	5	21	2	3
Cervix Uteri	44	10	22	3	5	1	1
Vulva	19	7	8	3	1	0	0
Peritoneum, Omentum, Mesentery	7	0	0	0	0	0	7
Vagina	6	1	1	4	0	0	0
Other Female Genital	4	0	1	0	3	0	0
Colon	3	0	0	1	0	1	1
Melanoma of Skin	2	2	0	0	0	0	0
Kidney and Renal Pelvis	2	0	1	1	0	0	0
Small Intestine	1	0	0	0	0	1	0
Thyroid	1	0	1	0	0	0	0
Non-Hodgkin's Lymphoma	1	0	1	0	0	0	0

# 2008 All Sites Distribution by Age

Age at Diagnosis	Number of Cases	Percent
20-29	6	<1
30-39	34	6
40-49	96	16
50-59	151	26
60-69	151	26
70-79	109	19
80-89	38	6
90-99	2	<1

# 2008 All Sites Distribution by Race

Race	Number of Cases	Percent
Caucasian	453	77
African American	132	22
Asian/Other	2	1

# Cancer Registry Report on Cases Presented at Breast Cancer Conference by Age January 2008- December 2008

Total Conferences held	 9
Total Cases Presented	 26
Average number of attendees.	 24
Total number of analytic breast cancer cases accessioned in 2008	 373

Number of Cases	Percent
1	4
3	11
6	23
6	23
8	31
1	4
1	4
26	100
	6 6 8 1 1

# Histology of Cases Presented:

Cribriform Carcinoma In-Situ Inflammatory Carcinoma Infiltrating Ductal Carcinoma Lobular Carcinoma Ductal Carcinoma In-Situ Comedo Carcinoma In-Situ Mucinous Adenocarcinoma

# Cancer Registry Report on Cases Presented at Gynecologic Cancer Conference by Age January 2008-December 2008

Total conferences held	9
Total cases presented	. 48
Average number of attendees	6
Total number of analytic gynecologic cases accessioned in 2008	204

Age at Diagnosis	Number of Cases	Percent
30-39	2	4
40-49	2	4
50-59	13	27
60-69	12	25
70-79	9	19
80-89	9	19
90-99	1	2
Total	48	100

#### Sites Presented:

Endometrium		
Cervix		
lleum		
Ovary		
Vulva		
Kidney		
Vagina		
Peritoneum		
Pituitary Gland		

### Histology of Cases Presented:

Carcinosarcoma Squamous Cell Carcinoma Sarcoma Adenocarcinoma Papillary Serous Adenocarcinoma Endometrioid Adenocarcinoma Clear Cell Adenocarcinoma Mixed Mullerian Malignant Tumor Melanoma Spindle Cell Type Granulosa Carcinoma Renal Cell Carcinoma Leiomyosarcoma Papillary Mesothelial Proliferation

#### About Woman's

Woman's Hospital opened in 1968 to meet the unique needs of women requiring specialized care. We have more experience with gynecologic and other surgery for women than most other hospitals in Louisiana. Today, we offer the latest diagnostic technology and surgical techniques. Woman's Hospital also has more doctors and nurses with exceptional experience in caring for women before, during, and after surgery. We are here to provide the resources women need through all the changes and stages of their lives.

Woman's Hospital is a 501(c)(3) nonprofit organization governed by a board of community volunteers. Contributions, along with proceeds from hospital operations, are reinvested in research, community education, service programs, equipment, and facilities.



Woman's Hospital is a Magnet hospital signifying nursing excellence and quality patient care.



Woman's Hospital is accredited by The Joint Commission. The oncology program is also accredited by the American College of Surgeons.