It gives me great pleasure to share with you highlights from another successful year of Carroll Hospital Center’s Cancer Program. Our ever-growing array of multidisciplinary services not only continues to meet the needs of our community, but also keeps us at the forefront of cancer diagnosis, treatment and follow-up care.

One of our newest services is a Genetic Counseling Program, launched this year in collaboration with the University of Maryland Greenebaum Cancer Center. Designed for cancer patients and those at risk for the disease, it is the only program of its kind in Carroll County. As part of the program, participants undergo a comprehensive family history and risk assessment, and meet with a certified genetic counselor to review results and options. Testing is available for all types of cancers, with a special focus on breast, pancreatic, ovarian and colorectal cancers.

In other news, enrollment in our clinical trials through our oncology partners, U.S. Oncology and the Carroll Cancer Center, remains robust. These trials give patients the opportunity to participate in groundbreaking treatments and therapies without having to travel far from home.

Our holistic approach to cancer treatment has broadened over the past year to include more specific cancer therapies, as well as supportive and palliative care. For example, to help with stress reduction and symptom management during treatment, we offer a host of complementary health services, such as massage, acupuncture, Reiki and integrative reflexology.

Next year will see significant investment of resources into the Cancer Program to further benefit our community.

Of course, I could not adequately summarize the past year without mentioning the well-trained, committed team of health care providers and Cancer Committee members whom I am so privileged to lead. I am grateful for their hard work and dedication to providing the best possible care.

Flavio Kruter, M.D.
Chairman, Cancer Committee
Recent statistics from the American Cancer Society (ACS) estimate that one out of every two American men and one out of every three American women will be diagnosed with cancer at some point during their lifetime. Cancer is the second leading cause of death in Maryland, accounting for 24 percent of total deaths in the State in 2006.

In Carroll County, cancer is one of the leading causes of illness, which is why Carroll Hospital Center makes it a priority to provide high-quality, convenient cancer care that targets the whole patient—mind, body and spirit.

Recognizing how difficult a cancer diagnosis can be on patients and their loved ones, Carroll Hospital Center offers a wide range of services to meet their needs. For families and friends, we sponsor several support groups and informational programs. Education and access to information are powerful tools that help members of our community make more informed medical choices, deal with a difficult diagnosis and adopt positive health habits to improve their quality of life.

Carroll Hospital Center provides the most advanced oncology treatment options available in a warm, caring and supportive environment. Whether offering inpatient or outpatient care, we advocate a team-oriented approach that includes board-certified medical oncologists, oncology certified nurses and specially trained staff. Throughout the course of treatment, patients receive information and updates concerning treatment protocols, side effects, nutritional issues and pain management.
**Support Services**

Many support services are available for patients and their loved ones to empower them with the knowledge and confidence to deal with cancer:

- **Cancer Navigation Services** – Available free of charge to men and women with all types and stages of cancer, cancer navigation specialists provide guidance and support through cancer diagnosis, treatment and recovery.
- **Genetic Counseling (in partnership with the University of Maryland Greenebaum Cancer Center)** – For cancer patients and those at risk for the disease. Results are shared by a certified genetic counselor in coordination with the patient’s physician.
- **Oncology Resource Center** – Located at the oncology unit, this library is available to all patients seeking additional cancer information.
- **Lymphedema Treatment Program** – Featuring licensed massage and certified lymphedema therapists for patients experiencing this side effect of cancer treatment.
- **The Boutique at the Women’s Place** – Specializing in merchandise for women with cancer. Items include breast prostheses, mastectomy bras, wigs, hats and turbans.
- **Look Good Feel Better** – ACS program to help women cope with the appearance-related side effects of cancer treatment.
- **Complementary health treatments** – Includes massage, acupuncture and integrative reflexology® to help with stress reduction and symptom management during treatment.

Treatments are provided by licensed therapists who have special certification in treating cancer patients.

- **Reach to Recovery** – ACS program that pairs breast cancer patients with area survivors.
- **I Can Cope** – ACS educational program for patients, families and caregivers.
- **Breast Cancer Support Group**
- **Cancer Support Group**
- **The Next Step** – A tobacco cessation maintenance program.
- **Man to Man** – ACS prostate cancer education and support group.
- **Pathways** – For anyone grieving the loss of a loved one.
- **Bridges** – An educational support group that teaches bereavement coping strategies.
- **Healing Hearts** – For children ages five through 17 who are grieving the loss of a family member or friend.
- **Camp T.R.** – Weekend grief retreat for children ages five through 17.
- **Ostomy Support Group**

**Community Outreach/Education/Screenings**

Education plays a key role in awareness, prevention and early detection. At Carroll Hospital Center, we strive to keep our community healthy through the following educational programs, screenings and resources:

- **Skin and prostate cancer screenings**
- **Total Health Expo** – Annual event promoting overall health, including cancer prevention.
- **Relay for Life** – ACS event to increase cancer awareness and support, and celebrate survivorship.
- **Tobacco cessation education, counseling and referral**
- **The Breast Center at The Women’s Place** – Providing coordination of care, support and guidance for women with breast disease before and after a breast cancer diagnosis.
- **Check it Out** – Breast and testicular cancer education programs for high school students.
- **Resource libraries** – Two locations, at our oncology unit and in The Women’s Place.
- **Nutritional services**
Carroll Hospital Center
Oncology Services, cont’d.

Carroll Home Care
Available 24 hours a day, seven days a week, Carroll Home Care offers a full range of home-based nursing and rehabilitative services throughout Carroll, Baltimore and Frederick Counties, including:
- Skilled nursing
- Home health aides
- Nutrition education
- Medical social work
- Infusion therapy
- Physical therapy
- Occupational therapy
- Speech therapy
- Wound care
- Palliative care services

Carroll Hospice
For individuals with life-limiting illnesses, Carroll Hospice provides both inpatient and home-based care around the clock. Services include:
- Inpatient facility with private rooms and interfaith chapel
- Expert care team and inpatient respite care
- Palliative care
- Social workers
- Pastoral and bereavement support for all ages

Cancer Navigation Program
Available to men and women with all types and stages of cancer, the cancer navigation specialists at Carroll Hospital Center provide personalized services, tools and resources to chart a course of treatment. All cancer navigation services are offered free of charge.

Genetic Counseling Program
In partnership with the University of Maryland Greenebaum Cancer Center, the Genetic Counseling Program is designed for cancer patients and those at risk for the disease. The only service of its kind in Carroll County, the program gives participants access to a comprehensive family history and risk assessment, as well as a certified genetic counselor to recommend testing and share results and options in collaboration with the patient’s physician. Counseling is available for all types of cancers, with a special focus on breast, pancreatic, ovarian and colorectal cancers.

Fiscal Year 2010 (July 2009 – June 2010)
Cancer Navigation Program Visits: 206
The Breast Center In-Person Visits: 289
The Breast Center Telephone Consultations: 641

When you compare a total of 542 cases of cancer treated in Carroll County in 2009 (a 13 percent increase over the previous year) with the large number of visits to both our Cancer Navigation Program and The Breast Center, it reinforces the vital need for cancer services in our community.

Eileen Overfelt, R.N., B.S.N., and Ann Boyles, R.N., B.S.
Cancer Navigation Specialists
The Cancer Registry of Carroll Hospital Center collects and analyzes cancer data under guidelines set forth by the American College of Surgeons Commission on Cancer. This information, which helps identify cancer trends, treatments and outcomes, is a reporting requirement of the National Cancer Data Base (NCDB), Maryland Cancer Registry and the North American Association of Central Cancer Registries.

Follow-up is an integral component of the Cancer Registry. Patients are followed for life, which encourages them to schedule yearly checkups.

Information shared through the Cancer Registry forms the cancer statistics in any given year. Patient confidentiality is respected and care is taken to safeguard the patient's personal information.

### 2009 Cases of Cancer

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<td>Total</td>
<td>542</td>
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<td>141</td>
<td>128</td>
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Number of cases excluded: 3

This report EXCLUDES CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases.
Lung Cancer
Facts and Statistics

Non-Small Cell Carcinoma (courtesy of ACS):
About 85 to 90 percent of lung cancers are non-small cell lung cancers (NSCLC). There are three subtypes of NSCLC:
• 25 to 30 percent are squamous cell carcinomas, which are often linked to a history of smoking and tend to be found in the middle of the lungs near a bronchus.
• 40 percent are adenocarcinomas, which are usually found in the outer region of the lung. A subtype of adenocarcinoma is bronchioloalveolar carcinoma, which usually has a better prognosis compared to other lung cancers.
• 10 to 15 percent are large cell (undifferentiated) carcinomas. This type of lung cancer usually spreads faster and is harder to treat.

Lung cancer in the United States
• Lung cancer (including both small cell and non-small cell carcinomas) is the second most common cancer found in both men and women.
• 15 percent of all new cancers are found in the lung.
• 2010 ACS estimates:
  • 222,520 new cases of lung cancer (116,750 men and 105,770 women).
  • 28 percent of all cancer deaths attributable to lung cancer and 157,300 deaths (86,220 men and 71,080 women) from the disease.
• More people will die from lung cancer than from colon, breast and prostate cancers combined.
• Most lung cancers are diagnosed at Stage IV since symptoms are often not present at early stages.

Risk Factors for Developing Lung Cancer
• Tobacco smoke
• Secondhand smoke
• Radon
• Carcinogen exposure in the workplace (e.g. uranium; inhaled chemicals, such as arsenic, beryllium, cadmium, silica, coal products and mustard gas)
• Diesel exhaust
• Air pollution

Common Symptoms of Lung Cancer
• A cough that does not go away
• Chest pain, often made worse by deep breathing, coughing or laughing
• Hoarseness
• Weight loss and loss of appetite
• Coughing up blood or rust-colored sputum (spit or phlegm)
• Shortness of breath
• Feeling tired or weak
• Reoccurring infections such as bronchitis and pneumonia
• New onset of wheezing

Imaging (screening tests to detect lung cancer)
• Chest x-ray
• PET scan
• CT scan
• MRI

Tests Used to Determine Lung Cancer
• Sputum cytology
• Bronchoscope
• Endobronchial ultrasound
• Endoscopic esophageal ultrasound
• Fine needle biopsy
• Mediastinoscopy and mediastinotomy
• Thoracentesis and thoracoscopy

Treatment for Lung Cancer
• Surgery
• Chemotherapy
• Radiation
• Targeted therapy

At Carroll Hospital Center, non-small cell lung carcinoma is most often diagnosed at Stage IV. National Comprehensive Cancer Network treatment guidelines for Stage IV lung cancer are:
• Systemic chemotherapy with targeted agents.
• Palliative care for comfort and quality-of-life issues.

Best ways to avoid getting lung cancer
• Do not smoke
• If currently smoking, QUIT IMMEDIATELY
2009 CHC Cases of Non-Small Cell Lung Carcinoma by Stage of Disease

Stage of Non-Small Cell Lung Carcinoma:
2009 CHC Data vs. 2008 NCDB Data
Q&A with Robert Rice, M.D., Ph.D.
Lung Cancer

After graduating from John Hopkins University with honors, Dr. Rice earned his medical degree and doctorate at the University of Pittsburgh School of Medicine. He completed an internal medicine residency at University Hospital Case Western Medical Center in Cleveland, followed by a fellowship in hematology/oncology at Vanderbilt University Medical Center. While at Vanderbilt University, he was also a research fellow in the National Institute of Health Specialized Program of Research Excellence for gastrointestinal cancers. He is board certified in internal medicine, medical oncology and hematology. In addition to being published several times, Dr. Rice is the recipient of multiple awards, including the American Associates of Cancer Research Young Investigator Award.

What are the prevalent causes of NSC lung cancer?
The most prevalent causes of lung cancer to date are smoking, asbestos exposure and silicosis.

Is there a recommended screening process for lung cancer?
Until recently, there has been no evidenced-based data for screening. However, a recent study has shown that in patients who are heavy smokers, a CT scan of the chest can detect lung cancer early enough to decrease overall mortality and morbidity. Recommendations on when and whom to perform CT scans are still being debated, but guidelines hopefully will be issued in 2011.

Is there a genetic link involved with NSC lung cancer?
In rare cases, an inherited genetic link can be involved in lung cancer, such as with Li-Freeman and cowdens syndromes. Also, in a small population of patients who are non-smokers, lung cancer can arise secondary to a mutation in a receptor called EGFR.

How is lung cancer diagnosed?
Lung cancer is often diagnosed from clinical symptoms, such as worsening shortness of breath, coughing up blood or weight loss.

What is the recommended workup after being diagnosed with lung cancer?
The recommended workup can vary depending on the stage of cancer. CT and PET scans are usually recommended and depending on what is found, pulmonary and thoracic surgery may be involved.

What is the most common stage for NSC lung cancer?
Unfortunately Stage IIIb and IV are the most common stages. Hopefully with better screening tools in the future that will change.

Why are the majority of cases not diagnosed until Stage IV?
Lack of effective screening; when clinical symptoms present, the disease is usually already metastatic.

What is the most effective treatment for Stage IV lung cancer?
Chemotherapy.

What research studies are available to patients with NSC lung cancer?
Expanding trials looking at targeted agents in first and second line therapy.

What is the survival outlook for patients with NSC lung cancer?
Overall, lung cancer is still not a curable disease unless caught prior to Stage III or IV. However, new regimens are improving overall survival and hopefully better screening tools in the near future will allow us to catch lung cancer before it spreads. The outlook is improving every year with ongoing research.
Oncology Service Line Committee
(left to right) Flavio Kruter, M.D., Leslie Simmons, Debbie Medura, Stephanie Reid, Toni Harless, Terri Haber, Eileen Overfelt, David Salinger, M.D., Roxanne Carroll and Janet Blank. Not pictured: Teresa Fletcher.

Cancer Committee
Flavio Kruter, M.D., Chair
David Salinger, M.D., Liaison Physician

Janet Blank
Earlene Bradford
Jen Burdette
Guy Cappuccino, M.D.
Roxanne Carroll
Linda Cuebas
Yousuf Gaffar, M.D.
Enrico Giangeruso, M.D.
George Grillon, D.M.D.
Vajira Gunawardane, M.D.
Toni Harless
Stephan Hochuli, M.D.
Laura Hooper
Sarah Lentz, M.D.
Marcia McMullin
Debbie Medura
Steven Miller, M.D.
Mohit Narang, M.D.
Eileen Overfelt
Bertan Ozgun, M.D.
Mary Peloquin
Stephanie Reid
Keith O’Reilly, M.D.
Robert Rice, M.D.
Candace Rutter
Leslie Simmons
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Trisha Wagman

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