

# Scrapbook



## UNC Lineberger Oncology Nurses Honored for Excellence

UNC Lineberger oncology nurses were recognized for the care and dedication they provide to cancer patients every day. Soraya Flores-Tan and Rose Dunaway were awarded UNC Lineberger Comprehensive Cancer Center's 2002 Oncology Nursing Excellence Awards. Wendy McBride was honored with a UNC Health Care Nursing Excellence Award.

"Nurses at the cancer center have a special job," said Dr. Shelton Earp, director of the center. "They provide so much of a patient's care and become close to the patient and family. They form enduring and memorable bonds. These awards are one way of honoring their excellence and commitment to the field of oncology nursing."

This year is the first of annual Center oncology nursing awards. The awards come with a \$1500 stipend for professional education activities.

The outpatient award is in memory of Charmayne S. Gray, one of UNC's and the nation's top oncology nurse practitioners who died tragically in an auto accident in 2002.



"Charmayne exemplified all the best about nursing—the individual care given to each patient, dedication to the highest professional standards and leadership in organizing oncology programs," Earp said.

Dunaway who received the Charmayne Gray Award, has worked as a pediatric oncology nurse at UNC for the past

17 years while Tan, who received the inpatient nursing award, serves as an oncology resource nurse for UNC Hospitals. Nurses were honored at a special reception held in their honor. *Top Photo (left to right):* Dr. Steve Bernard, medical oncology, nominated hematology/oncology nurse Wendy McBride for a UNC Health Care Nursing Excellence Award; Dr. Shelton Earp, Lineberger director; Rose Dunaway, Charmayne S. Gray Oncology Nursing Excellence award winner; Mr. Bill Gray, Charmayne Gray's husband; and Justin Gray, Charmayne and Bill Gray's son. Soraya Flores-Tan was unable to attend the ceremony. *Bottom Photo (left to right):* Rose Dunaway and Soraya Flores-Tan. ●



## Prostate Cancer Symposium Provides Healthcare Professionals with Medical Updates

Over 150 healthcare professionals attended the "Multidisciplinary Advances in the Treatment of Prostate Cancer" symposium at the Friday Continuing Education Center on January 31-February 1. The evening program featured a reception, dinner and a talk: (left to right) Brenda McCall, nurse coordinator for the UNC Lineberger Urologic Oncology Program; after dinner speaker William Friday, president emeritus of The University of North Carolina; Dr. Michael Carducci, symposium speaker; Dr. Ballentine Carter, symposium speaker; Mrs. Ida Friday; Dr. Shelley Earp, director, UNC Lineberger Comprehensive Cancer Center; Dr. Raj Pruthi, course director; assistant professor of surgery and co-director UNC Lineberger Urologic Oncology Program; Dr. David Omstein, assistant professor of surgery and co-director UNC Lineberger Urologic Oncology Program; and after dinner speaker and prostate cancer survivor Professor Chuck Stone, Walter Spearman Professor of the UNC School of Journalism and Mass Communication. The program was supported in part by an unrestricted education grant from Aventis Pharmaceuticals. ●



## Relay for Life

HER-2 Crew team of 34 took part in the American Cancer Society's Relay for Life. The team was led by Vanessa M Muniz-Medina. Team members came from Channing Der's laboratory, Hope Valley Pre-School, Carboro Elementary School as well as members from Puerto Rico. The team was named in honor of Vanessa's mother-in-law, Carmen Alvarez, who has HER-2 positive breast cancer. ●

## Lineberger Center Welcomes Colossal Colon Tour to Campus

The Colossal Colon—a 40-foot-long, 4-foot-tall replica of the human colon—made Chapel Hill the first stop on a nationwide 20-city tour. The event, sponsored by Cancer Research and Prevention Foundation and made possible by Roche, also featured nine hands-on, interactive activity stations, covering topics on colon and rectal anatomy, as well as colorectal cancer prevention, early detection and treatment.

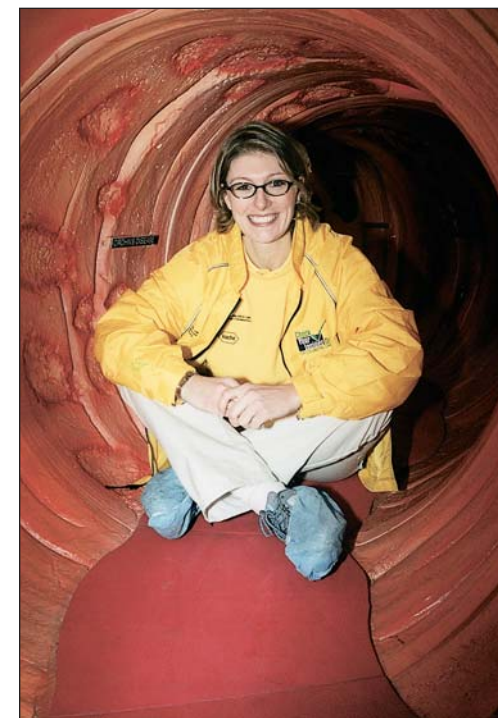
The colon was the idea of Molly McMaster, a 27-year-old colon cancer survivor. The Cancer Research and Prevention Foundation is headed by Carolyn "Bo" Aldigé, foundation founder and president and UNC Lineberger Board of Visitors member.

Despite inclement weather, the event was attended by 2500 people from as far away as Spartanburg, S.C., and Greensboro, N.C. A kindergarten class and a seventh grade class also participated. The larger-than-life colon spurred many comments from visitors. One four-year-old was heard asking, "Mommy, does it smell in there?" before crawling through the model.

"Molly and Carolyn have spawned a truly unique health education experience. There is only one Taj Mahal, one Oscar Meyer Weiner truck, and only one Coco the Colossal Colon," said Shelley Earp, Lineberger Center director, at the opening ceremony at McCorckle Place. ●



Above: Bo Aldigé welcomes visitors to the kickoff of the Colossal Colon Tour. Top Right: Molly McMaster, creator of the Colossal Colon, shown here in her creation. Bottom Right: Speakers and participants in the Colossal Colon Kickoff (left to right): Dr. Robert Sandler, director of the UNC Center for Gastrointestinal Biology and Disease, and a national expert on colon cancer screening; Senator Bob Carpenter, instrumental in creating the NC Advisory Committee on Cancer Control and Coordination; Dr. Steve Bernard, UNC medical oncologist whose expertise in colon cancer has helped patients for over 20 years; Molly McMaster; Dr. Shelley Earp, Lineberger director; Mickey Dougherty, nursing professor at UNC and colon cancer survivor; Bo Aldigé; Chapel Hill Mayor Kevin Foy, a colon cancer survivor proclaimed the week of February 16-23, 2003 as "Check Your Insides Out Week."



## calendar of events

**June 1**  
"What Makes Your Heart Sing?"  
Celebration of National Cancer Survivors' Day.  
NC Children's Hospital, Chapel Hill, NC.

**June 14**  
Susan G. Komen Breast Cancer Foundation  
Race for the Cure. Raleigh, NC.

**June 26-29**  
North Carolina Hunter Jumper Association  
Horse Show. To benefit UNC Pediatric  
Hematology/Oncology. James B. Hunt Horse  
Complex. Raleigh, NC.

**September 13**  
Cancer Patient/Family Educational  
Symposium. Friday Continuing Education  
Center, Chapel Hill, NC.

**October 17**  
Board of Visitors. Lineberger Cancer Center,  
Chapel Hill, NC.

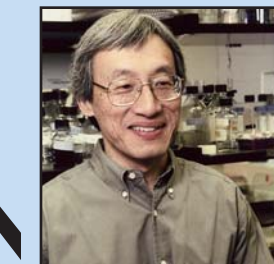
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CB# 7295  
School of Medicine  
University of North Carolina at Chapel Hill  
Chapel Hill, NC 27599-7295  
(919) 966-3036  
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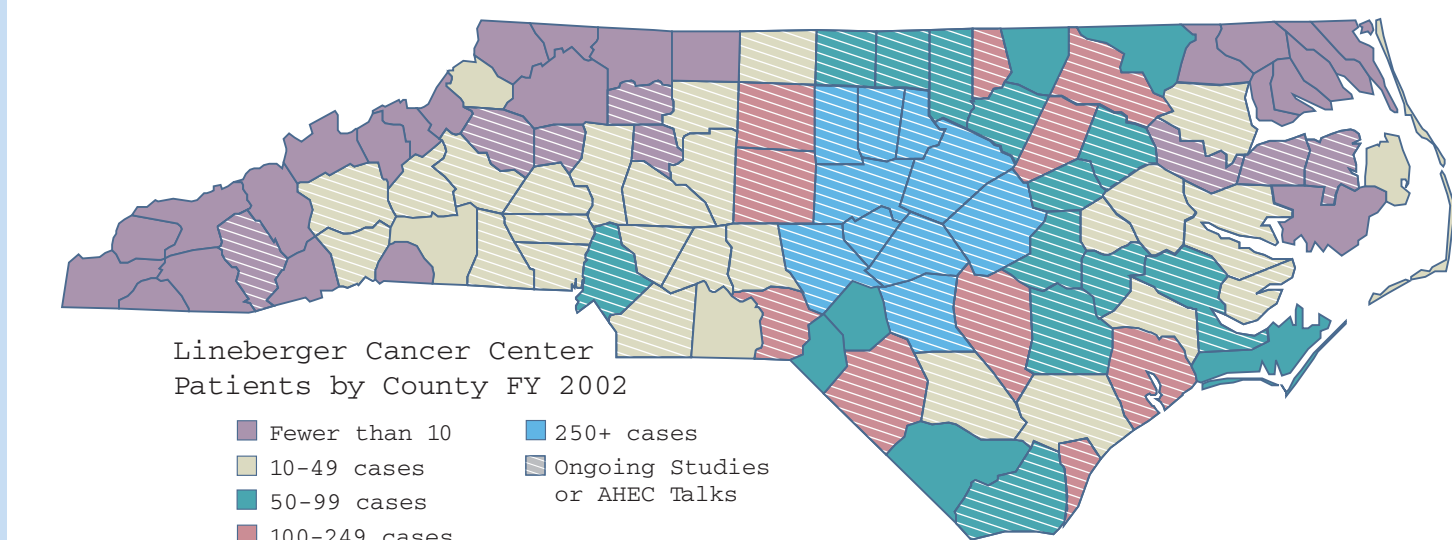
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the inside line up

## UNC Lineberger From Screening to Treatment, We Cover North Carolina



When it comes to cancer, UNC Lineberger has North Carolina covered. Whether it's treating patients with innovative therapies, moving screening programs out to the communities, collaborating with community physicians about patient care and providing them with clinical updates, or offering counseling and genetic testing to people at increased risk — UNC Lineberger strives to provide North Carolina citizens the best possible care for cancer prevention, screening and therapy.

"Cancer research is at an exciting moment," says Dr. Shelton Earp, director of the Lineberger Center. "We have the opportunity to exploit new knowledge in cancer genetics and will soon have the ability to monitor the efficacy of therapy as well as to tailor treatment for each individual."

In North Carolina each year, 39,000 people will be diagnosed with cancer and 16,500 people will die from their disease. Responding to and reversing those statistics is Lineberger's mission: increase screening, improve diagnostics, refine, develop and tailor therapies, and train new scientists, physicians and caregivers.

"UNC Hospitals was founded to serve the state of North Carolina by providing excellent healthcare services to its

citizens," said Eric Munson, CEO of UNC Hospitals. "Our cancer center is a prime example of how we reach every part of the state in fulfilling our mission."

Researchers and clinicians at Lineberger work together to bring the most promising research to cancer patients and those at risk of getting cancer. The emphasis on translational research ensures that North Carolinians receive access to the most innovative diagnostics, treatments and preventives available.



Oscar (left) and Carnell (right) Evans.

### Valuable Resource

Screening is an important way to determine cancer risk and to detect cancer at an early stage, a stage at which it is easier to cure. Taking part in routine employer and hospital-sponsored screening was crucial to the health of two Oxford brothers.

Carnell and Oscar Evans each discovered they had an elevated prostate specific antigen, commonly called PSA; this is a potential early indicator of prostate cancer and prompted the brothers to visit their doctor, Linga Vijay, a private practice physician in Henderson, for further tests. He referred both to UNC Lineberger to see Raj Pruthi, co-leader of the Urologic Oncology Program.

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# Director's Message



Dr. H. Shelton Earp, III

Since our beginnings in 1975, serving the people and state of North Carolina has been the mission of the UNC Lineberger Comprehensive Cancer Center. Today, UNC — its Hospitals, Health Care system and Cancer Center — is a national leader in cancer prevention, early detection and therapy. But to go forward we must build a new N.C. Clinical Cancer Center to replace our antiquated 50-year-old facility.

The number of patients seeking their cancer care at UNC is increasing. The attraction, they say, is access to new forms of treatment and our multidisciplinary approach. Each patient is seen and evaluated by a team of medical specialists who work side-by-side in the patient's best interest. Together they discuss the case and come to consensus on the best therapy for that individual.

Our "one-stop shopping" approach for cancer care treats the whole person, not just the disease. In addition to medical expertise, UNC offers support programs for patients and families. But the success of our teams comes at the price of overcrowded clinics and a shortage of space for support services and programs.

At the same time, more and more people are discovering that our state is an attractive place to live and retire. And as our citizens age, their risk of cancer rises. Among people 65 and older, cancer incidence rises by 10-fold! To care for the growing numbers of cancer patients in North Carolina, we need facilities that will meet this need.

## UNC Lineberger Names Debbie Dibbert as Director of External Affairs

Debbie Dibbert has been named director of external affairs at the UNC Lineberger Comprehensive Cancer Center.

Debbie has served as director of development, alumni affairs and public relations at Durham Academy, Durham, NC, since 1995. Prior to that she served as associate director of development.

In the 10 years Debbie was at Durham Academy, the school's fundraising program has become one of the best among North Carolina independent schools, one of the leading programs in the Southeast and has won national awards for fundraising performance from the Council for the Advancement and Support of Education (CASE). She led successful capital campaigns, a thriving annual fund and planned giving program and an extensive

also increase the standard of care and improve clinical research at other institutions across the state.

As we look to the future, we are always thinking about preventing cancer—the best way to keep people healthy. A new N.C. Clinical Cancer Center would include a

prevention clinic focused on surviving patients, their families and high-risk individuals, which will integrate all forms of prevention and early detection research. How will this clinic help patients and families?

Knowledge of inherited genes will provide clues about families that need special attention. Targeted prevention strategies or sophisticated detection techniques—using computerized mammography or detailed molecular analysis of blood for tumor markers—will be applied to high-risk families. Innovative methods of imaging will allow earlier detection of a cancer. The earlier you can detect a cancer, the more treatment options are available.

UNC Lineberger faculty from all Health Affairs schools offer programs to promote prevention strategies and increase the number of people screened for cancer. Our faculty work with communities in the far reaches of the state to spread the word about what we've learned about preventing cancer. To successfully develop and offer these services, we need more room.

The science of cancer care is at a pivotal moment. To make the most of new ideas and advancements for our patients and families, we need to begin now to plan for and construct a new facility. We have developed an integrated approach to reducing the burden of cancer in North Carolina. Our citizens deserve the best care that we, the public cancer center for the people and state of North Carolina, can offer.

Though the needs of our state are great during a difficult economy and a troubled time, North Carolina must support a commitment to the best care for a disease that is a growing problem, despite our best efforts at prevention and early detection. We ask for your support and voice.

public relations and communications program.

Prior to her work at Durham Academy, Debbie was co-director of the Chapel Hill Downtown Commission. She has been an active volunteer in the Chapel Hill community including serving as president of the Chapel Hill Service League, the grants committee of the Triangle Community Foundation and as a board member of the Chapel Hill Ronald McDonald House.

About her new position at Lineberger, Debbie said, "I look forward to working with the faculty, staff and volunteers to increase public awareness and generate much-needed support for the priorities of the UNC Lineberger as we strive to bring the best in cancer prevention, detection, and treatment to the people of North Carolina."



UNC Lineberger is designated a comprehensive cancer center by the National Cancer Institute.

*Cancer Lines* is a semi-annual publication of the UNC Lineberger Comprehensive Cancer Center, The University of North Carolina School of Medicine at Chapel Hill.

Dr. H. Shelton Earp, III, Director  
Dr. Joseph S. Pagano, Director Emeritus  
Dianne G. Shaw, Director of Communications/Executive Editor  
Margot Carmichael Lester, Editor

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**UNC Lineberger  
Comprehensive Cancer Center**  
CB# 7295  
School of Medicine  
University of North Carolina at Chapel Hill  
Chapel Hill, NC 27599-7295  
(919) 966-3036  
<http://cancer.med.unc.edu>

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# Scrapbook



**Meeting Held for Patients and Families about Clinical Trials Process.** The North Carolina chapter of The Leukemia & Lymphoma Society sponsored a meeting at UNC on "Cancer Clinical Trials: Understanding the Process of Bringing New Cancer Treatments from the Lab to the Patient." The meeting was held for patients and families to learn more about how clinical trials are designed and conducted.

Session speakers and sponsor (left to right): Dr. Steve Bernard, chairman of the UNC School of Medicine's Institutional Review Board; Holly D'Addarno, patient services manager of the NC chapter of The Leukemia & Lymphoma Society, sponsor of the meeting; Dr. Mark Socinski, medical director of the UNC Lineberger Protocol Office; Joy Ostroff, director of the UNC Lineberger Protocol Office; and Tina Shaban, coordinator of the Cancer Patient/Family Resource Center.

For more information about the Study of Tamoxifen and Raloxifene (STAR) for breast cancer prevention, please call 919-966-4432.

## Clinical Trials: Translating Science to Leading-Edge Therapy

With more than 150 clinical trials under way, Lineberger researchers are testing preventive, diagnostic, treatment, and symptom management options for all types of cancer.

Participants in the trials get access to the latest developments in cancer research, which can potentially affect the disease process. "With trials, we hope to increase cure rates and minimize the spread of cancer so patients can live longer," explains Joy Ostroff, RN, BSN, OCN, facility director at Lineberger's Oncology Protocol Office. "We also explore treatments that manage cancer symptoms to improve patients' quality of life while living with cancer."

"Clinical trials are important ways for patients to access promising investigational agents in their own backyard," she adds. "Patients participating on clinical trials are brave and courageous explorers. Yes, they are motivated to cure their disease, but, these patients also have a strong desire to help

make a difference in the "War Against Cancer."

One such patient was John David Tola, a 61-year-old lung cancer survivor who participated in two trials at Lineberger before his death in November 2002. So committed was Tola to his role in cancer research, his family included this line in his obituary: "He was involved with cancer research at UNC by participating in clinical trials."

"Mr. Tola was more than a participant," Ostroff says. "He was a cancer hero."

Clinical trials are an integral part of Lineberger's focus on translational research, taking basic science from the lab to the patient. "Translational research is bridging the gap between what is learned at the scientific bench and tested in animal models, and bringing that knowledge in the form of a novel agent or sequences of treatments to patients through the process of clinical research," Ostroff notes.

"We collaborate with industry, the National Cancer Institute, and the Food and Drug Administration in a highly regulated, safe environment to explore, discover, design and implement strategies driven by good science to fight cancer on many different fronts."

The following clinical trials illustrate the depth and breadth of Lineberger's cancer research program. For information about any of these trials, please call 919-966-4432 or visit the UNC LCCC website at <http://cancer.med.unc.edu/patient/protocols>.

**Intraoperative Radiotherapy for Early Stage (Stage I) Breast Cancer (LCCC 0218).** This is a pilot study to determine the possibility of partial



## A Patient's Perspective on Clinical Trials

When Bear Creek native Ada Peoples returned to North Carolina in 1995 after a 29-year career as an occupational health nurse in New York, she decided that in her retirement she wanted to do something to help others. She saw an ad in *Carolina Woman* about a breast cancer prevention trial, and mindful that her mother and her aunt had had breast cancer, decided to enroll. She saw it as a way to do something for her children and took part in the first prevention trial, comparing tamoxifen to a placebo.

"So few blacks take part in trials, I wanted to do something helpful." For almost five years, she took a pill every day. She and her doctor didn't know if she was receiving an active drug, but Mrs. Peoples says, "I could tell that something was different in my body, so I was pretty sure I was getting the drug." She was, and is now close to the end of the two-year follow-up stage of the trial.

"I would encourage people to take part in a trial. Some people think they'll be just a guinea pig," she said, "but someone has to try a medicine to see if it works. Also, I got benefits from taking part. Any medical problem I have is addressed quickly because frequent tests are part of the trial. Participants are closely monitored."

She mentions her participation to others because "education about how to take care of ourselves is important." She's encouraged at the increasing number of African-Americans who are getting regular screenings, such as mammography.

"We're blessed to live where we do. I know that anytime I have a health problem, UNC is just 35 minutes away."



## Light the Night

UNC's "Team Lineberger" participated in The Leukemia and Lymphoma Society's "Light the Night" Benefit in Raleigh and helped to raise over \$3,800 for the society. The team was comprised of staff from UNC Lineberger's Leukemia Lymphoma and Myeloma Program. UNC patient Cliff Layman and pediatric patient Andrew Tibbetts were the honored speakers for the event.



## Carolina Cancer Focus

Here, a UNC group of dynamic student volunteers, work to raise awareness of and funds for cancer research. Here, they display a quilt the group assembled from squares honoring loved ones with cancer. The quilt now hangs in the clinical cancer center.

## We Cover North Carolina

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"Translational research is the effort to bring findings from the research laboratory to the patient. It is the unique contribution of academic health centers and increasingly will become UNC's role within the state."

Hutchison started the trial the day after her diagnosis was confirmed. "I wanted to get the therapy started as quickly as possible," she explained. After chemo, she had surgery and then began radiation therapy. The whole process took eight months, followed by a course of Herceptin every three weeks.

Hutchison encourages people to consider clinical trials. "For me it was a win-win situation," she says. "I helped myself and contributed to science."

She recommends UNC Lineberger to family, friends and colleagues. "The doctors and other caregivers are wonderful," she says. "They took an aggressive approach to my cancer. I wish everyone could start their treatment here."

"Each of these stories exemplifies the reach of UNC Lineberger and its programs into the state. We are determined to bring the best of the new treatments to our patients, then use fundamental discoveries to create the next generation of clinical trials," said Shelton Earp.

## Briefs

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had at least one colonoscopy over the previous year or so, 17 percent of those in the treatment group had one or more polyps compared to 27 percent of those in the other group.

"Also, we found that the average number of polyps was lower in the aspirin group, and aspirin delayed the appearance of polyps and slowed their development," Sandler said. "The fact that each of these measures went in the same direction supports the idea that this is a real effect, and it's not simply coincidence."

"These findings are good news and encouraging, but they don't mean that people can assume they can protect themselves completely from colon cancer," the UNC physician said. "We view aspirin or drugs like aspirin as being an adjunct to colonoscopy, during which we can remove any polyps that aspirin failed to prevent."

An earlier study suggested that calcium can prevent polyp formation to about the same extent that aspirin can, Sandler said. Before people begin taking aspirin, they should discuss the matter with their doctors.

"We recommend that people over age 50 undergo screening for colon cancer," he said. "If they are screened with colonoscopy, and it is normal, they do not need the exam again for 10 years. There are other screening tests that are also effective, including fecal occult blood testing every year and sigmoidoscopy, which views half as much of the colon, every five years."

# Profile

## Architecture & Biology: Designing Drugs to Fight Cancer

"While I always enjoyed nature and biology, my initial [career] ideas were in graphic design and architecture," says Channing Der. Somewhere along the way, biology won out. Today, Der, a professor of pharmacology, focuses on the design of disease. "My graphic design is restricted to making slides and figures for my talks."

At the Lineberger Center, Der's research focuses on the genetic basis of human cancers. "While it is clear that cancers arise as a consequence of mutations or perturbations of our own genetic information," he says, "the full extent of the genes involved and what these genes do needs to be much better understood. The basic premise for our studies is that 'good genes have gone bad' in cancer cells. Thus, we need to know what those genes are, how their normally healthy functions are now disrupted in cancer cells, and how we might design and develop new anticancer drugs to correct these defects."

Der and his research team are currently identifying new cancer genes and evaluating drugs that target known genetic defects for cancer treatment. "We study the cancers that most significantly

impact our society today — causing loss of life, loss of human productivity, and expense for the patient and the healthcare system." Primarily, these are cancers of the lung, colon, breast, ovary, pancreas and white blood cells.

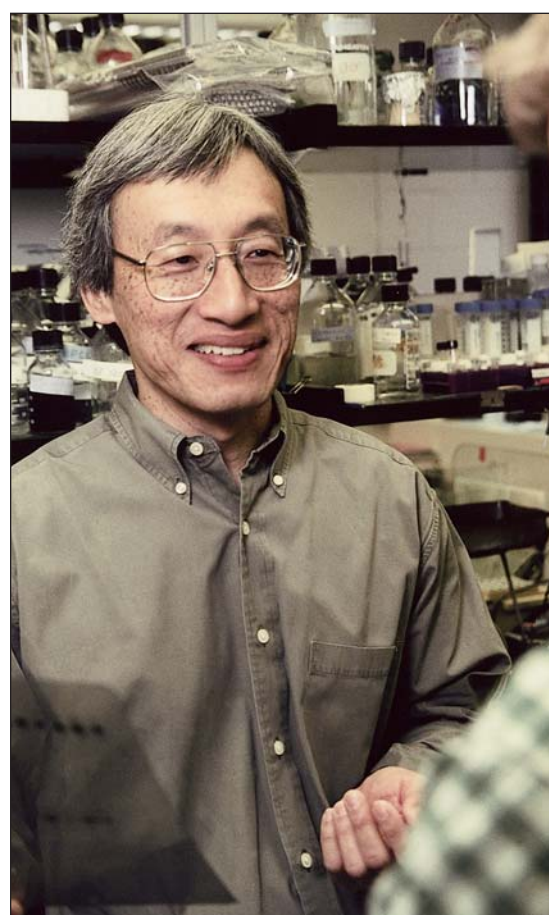
"While our current approaches for cancer treatment are very effective against a number of cancers, there are many cancers that escape treatment," Der explains. "The need for new approaches and drugs for cancer is acute, and our research is aimed at achieving the goal of improving cancer therapy."

Der finds his job both exciting and challenging. "As we learn more about the complexities of the cell and how cancer cells arise, we unearth many unexpected findings that reveal how remarkably complex and sophisticated are the processes that control the behavior of cells of our body," he says.

Despite advances, Der says the greatest challenge is patience. "Deciphering the cancer's genetic basis will take time," he explains. "It will require even more time before we can successfully apply what we have learned to impact the cancer patient."

After receiving his B.A. in biology from UCLA, Der earned his Ph.D. in microbiology and molecular genetics at the University of California at Irvine. He and his wife, Kathy, a renowned teacher of autistic children, and their two children moved to Boston where he did postdoctoral training at Harvard Medical School and the Dana-Farber Cancer Institute.

His decision to join the research team at Lineberger was based on many factors, including a positive research environment and a stimulating and supportive atmosphere. "There is an excellent



breadth and depth of interactive colleagues that I can work with," he notes. "The research can be challenging, and it makes the work fun and rewarding to be in such a wonderful research community at Lineberger and at UNC." ●

## Cancer Prevention and Control

# Improving Health Across NC

For some North Carolina women, there's more to be gained from a trip to the beauty parlor than a stylish new hairdo. The *North Carolina BEAUTY and Health Research Study—Bringing Education and Understanding To You*—will be conducted over a four-year period at 48 salons located throughout North Carolina.

The study will use 48 beauty salons to test different methods for delivering positive health messages, helping to promote health and reduce risk of cancer and other leading causes of death. Chief investigator Laura Linman, assistant professor of health behavior and health education, and colleagues will assess the impact on individual customers' health behaviors, as well as any changes to policies or practices in the salon environment itself, such as changes to food choices available at the salon.

The BEAUTY program is one of several Lineberger cancer prevention initiatives involving North Carolinians. "One of the truly wonderful things about this study, and several other studies conducted through the Lineberger Center, is that it reaches out to the North

Carolina population in important ways, with a focus on underserved populations," says Barbara Rimer,



Laura Linman (right) and Veronica Carlisle (left).

professor of health behavior and health education in the School of Public Health and deputy director for population sciences at the Lineberger Center. She is the former director of the Division of Cancer Control and Population Sciences at the National Cancer Institute. "Like many cancer control studies, it delivers services while answering important questions about how to most effectively change behavior."

Other population-based studies include:

The *North Carolina Colon Cancer Study*, designed by Robert Sandler, professor of medicine and epidemiology, and Bob Millikan, associate professor of epidemiology, compares cancer cases to random controls to understand how various factors such as diet, physical activity, medicines and lifestyle factors affect colon and rectal cancers and involves 1,600 Caucasian and African Americans in 33 counties. A related study, the *North Carolina Colorectal Cancer Care Outcomes Research and Surveillance*, investigates the impact of cancer care on outcomes in 1,000 colon and rectal cancer patients in a 22-county region. This is one of only six such studies in the U.S. funded by the NCI under a special initiative.

Millikan also is conducting a study of genetic and environmental susceptibility to malignant melanoma with 1,600 North Carolinians in 65 counties as part of an international collaborative study. Researchers will investigate the effects of exposure to sunlight and interactions with DNA repair genes, and identify other risk factors for melanoma in Caucasians, African-Americans, Native Americans and Hispanics.

In the Carolina Breast Cancer Study, Millikan is studying approximately 4,600 women to analyze lifestyle, environmental and molecular factors related to breast cancer. The study includes women from rural areas, younger women and African Americans. Information from the study will allow investigators to evaluate how risk factors for breast cancer, with an emphasis on how genetic and environmental factors combine to increase the risk of breast cancer. The results will serve the broader community of women with breast cancer.

Directed by Andy Olshan, professor of epidemiology and cancer epidemiology program leader at UNC Lineberger, the *Carolina Head and Neck Cancer Study (CHANCE)* is a new population-based study of the genetics of head and neck cancer funded

by the NCI. Researchers will evaluate the relation between variations (polymorphisms) of diverse genes



Andy Olshan

that, in combination with exposure to tobacco and alcohol, modify the risk of squamous cell carcinoma of the head and neck. Over the next five years, researchers will identify and interview 1,700 patients with newly-diagnosed first primary tumor of the oral cavity, pharynx and larynx, residing in 46 North Carolina counties, as well as 1,700 controls from the same area. Interview topics include alcohol and tobacco use, diet, medical history, family history of cancer, and occupation. This work could identify inherited genetic factors that might predispose an individual to head and neck cancer. Identification of genetic susceptibility factors may be useful in designing smoking and alcohol cessation programs and predicting survivors of head and neck cancer who may be at a higher risk for the development of new cancers.

The *North Carolina Prostate Cancer Study*, led by Paul Godley, associate professor of medicine, will determine racial differences in prostate cancer treatment outcomes, evaluating differences in prostate cancer screening history, initial treatment, socio-



Paul Godley

economic status, access to medical care, diagnostic delay and quality of life between African-American and Caucasian men in 33 counties of western, central and eastern North Carolina.

The *WATCH (Wellness for African Americans Through Churches)* program is a church-based study of the impact of diet, exercise and screenings on colon cancer.

The pilot program involved 800 parishioners in five counties and a related study will investigate the effect of the same activities on prostate cancer in 200 participants. Marci Campbell, associate professor and Lineberger's cancer prevention and control program leader, is the principal investigator for this study and the Health Works in the Community. HWC involved 1,200 women in five eastern North Carolina counties to discover ways to encourage healthy eating, physical activity and other health behaviors that are compatible with the workplace.

"Lineberger's Population Sciences Program is one of the strongest in the U.S.," Rimer says. "The investigators here have a real commitment not only to the



Marci Campbell

best science but also to serving the state in which they live. The challenges for the next several years will be to remain well-funded in an era of diminishing resources and to expand our efforts in important, under-studied areas such as cancer survivorship." ●

# Briefs

## Protein Patterns May Aid Prostate Cancer Detection

A test that detects a specific pattern of proteins in blood may distinguish benign prostate conditions from prostate cancer more effectively than the current biomarker for the disease, protein specific antigen, PSA. The test detected 95 percent of prostate cancer cases from a single drop of blood from each patient. Moreover, it helped rule out prostate cancer for 71 percent of men with intermediate PSA scores (4-10), which would have allowed them to avoid an unnecessary, invasive biopsy procedure. Currently, most men with PSA scores between 4 and 10 are recommended for a biopsy, even though 75 to 80 percent of them do not have prostate cancer.

"This new technology has the potential to revolutionize how men are diagnosed with prostate cancer," said Dr. David K. Ornstein, a co-author of the study, assistant professor of surgery and a member of the Lineberger Comprehensive Cancer Center. "It's likely that it will be possible to use a simple

blood test to accurately identify men who are affected with a harmful prostate cancer but spare healthy men from undergoing unnecessary biopsies."

While the new findings provide further validation that the protein pattern approach

can be effective in cancer detection, Ornstein and his co-authors note that it cannot replace biopsy as a definitive cancer detection tool. However, they suggest that "serum proteomic pattern analysis may be used in the future to aid clinicians so that fewer men are subjected to unnecessary biopsies."

In collaboration with Correlologic Systems, Inc., and the FDA/NCI Clinical Proteomics Program, the Lineberger Comprehensive Cancer Center at UNC is conducting a clinical trial to study if this new technology can be used to determine the need for prostate biopsy among men with elevated PSA tests or abnormal rectal exams.

"We're attempting to refine and further evaluate this new tool. The goal is to develop a clinically useful test for the benefit of patients," Ornstein said.

## Study Helps Explain Gene Silencing in Developing Embryo

New research sheds light on the process that silences a group of genes in the developing embryo. Down regulation of gene expression, or gene silencing, is considered crucial in normal development.

In the embryo, proteins expressed by different sets of genes help signal the pattern of development, including limb formation. However, when that work is completed, the genes responsible must be turned off, said Dr. Yi Zhang, assistant professor of biochemistry and biophysics, and a member of UNC's Lineberger Comprehensive Cancer Center.

"During the early embryonic development, a group of genes called Hox genes needs to be expressed. After they've been expressed and have set the body pattern, they have to be silenced permanently during the life of the organism," Zhang said.

Zhang said another gene group, the Polycomb group, has been intensely studied for its role in silencing Hox in organisms as diverse as flies and mammals, including humans. "We know that if something is wrong with the Polycomb group, if these genes are mutated and cannot silence Hox, then development becomes abnormal.

"Basically, we found that the Polycomb proteins function through methylating a particular lysine residue, lysine 27, on histone 3," Zhang said. When enzyme activity causing methylation of this site is blocked, Hox gene silencing does not occur.

Given those findings, Zhang and his study team could explain the permanence of Hox gene silencing. "Histone methylation cannot be reversed. It becomes permanent, a long-term genetic marker. Thus far, no 'histone demethylase' has been discovered."

The study was supported by grants from the

National Institute of General Medicine at the National Institutes of Health and the American Cancer Society.

## Major Study Shows Aspirin Can Cut Polyp Return In GI Cancer Patients

Patients who have had colorectal cancer may reduce their risk of suffering a recurrence by taking an aspirin daily, according to a new study conducted by Robert Sandler, professor of medicine, chief of the division of digestive diseases and nutrition, director of UNC's Center for Gastrointestinal Biology and Disease and UNC Lineberger faculty member.

The study showed that subjects who took 325 milligrams of aspirin each day had a 35 percent lower risk of developing polyps in their colons during the period examined than did patients who received an inactive placebo. Polyps are considered precursors to most colorectal cancers.

"From both animal research and observational studies, we've recognized for a long time that aspirin might decrease the risk of colon cancer," said Sandler, the study's principal investigator. "To find out whether aspirin really worked, we needed a randomized trial where we could compare aspirin with a placebo. With the help of a large consortium of hospitals and a large number of patients, that's what we've done."

Doctors found that among the 517 patients who

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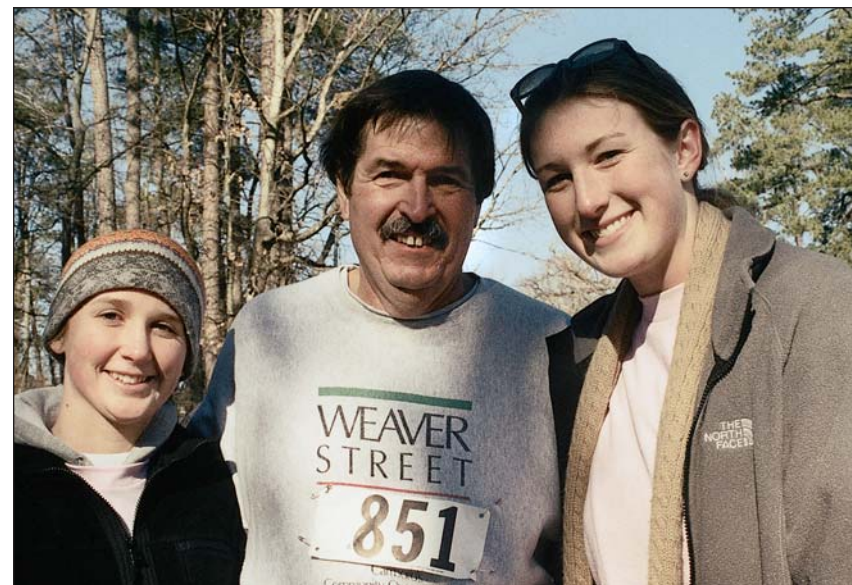
# Lineberger



**North Carolina Central University Holds Annual Walk for the Cure.** The Iota chapter of Phi Beta Lambda Inc. at North Carolina Central University held a Walk for the Cure on January 25. More than 150 students and others participated in the Walk. The UNC Breast Program received \$1,500.00 from the proceeds.



**Breast Cancer Program.** Mary Seagroves, member of the UNC Breast Center Advisory Board, and her husband Pete celebrated their 10th wedding anniversary on October 10 at the Carolina Club. The celebration was also a fundraiser for the Breast Cancer Program. The event raised \$1700.00. Shown here (left to right): Pete Seagroves; Mary Seagroves; Jeanhee Hoffman; and Jeff Hoffman.



**Zeta Tau Alpha.** The UNC-Chapel Hill chapter of Zeta Tau Alpha sorority held its annual 5K run. (Left to right): Kristen Novak, party chair; Dr. Shelton Earp, Center director; Katie Dickman, 5K chair.



**Cancer Patient/Family Resource Center Coordinator.** The new coordinator for the Cancer Patient/Family Resource Center is Tina Shaban. Tina comes to UNC with a background in pediatric nursing. As coordinator she directs and develops patient education and support programs. She is shown here helping a patient to find internet information.



**Leukemia/Lymphoma Program Gift.** Daniel Berenson presents a \$1,600 check to Dr. Beverly Mitchell, Center associate director, from a fundraiser held in memory of Liz Lucas, his partner, for the Leukemia/Lymphoma Program.

## We Cover North Carolina

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Oscar's employer, Lenox China, offered the employee screening that led to his prostatectomy in September 2001. Carnell's PSA was detected at a screening at Halifax Regional Hospital in Henderson. He underwent a laproscopic prostatectomy in February of 2002, and is doing well. The brothers are pleased with their care at UNC, and describe Pruthi and the staff as "super."

Approximately 6,800 Tar Heel citizens will be diagnosed with prostate cancer this year, according to the ACS. Almost 900 will die from the disease. "Prostate cancer is the most common cancer in men, and the second most-common cause of death after lung cancer," Pruthi notes. "Screening allows us to detect it earlier, and this translates into better treatments and patient outcomes." This may be particularly important for African-American men in North Carolina who have one of the highest rates of prostate cancer in the world.

"Most folks are scared of what they might find, but that's probably the worst thing," says Carnell. "They need to find it early so something can be done." Oscar agrees, "taking care of the problem is the best thing to do."

## Multi-Disciplinary Approach

In the spring of 2000, UNC nursing student Katherine Wilson was diagnosed with small-cell lung cancer. Wilson and her family were as shocked as her doctors to find lung cancer in such a young person. According to the ACS, about 5,600 North Carolinians will be diagnosed with lung cancer this year and 5,100 people will die of the disease.

"Lung cancer is the second-leading cancer in men and women, and the most common cause of cancer mortality," said Mark Socinski, associate professor of medicine and director of the Lineberger Center's Multidisciplinary Thoracic Oncology Program, in which specialists in pulmonary medicine, medical oncology, radiation oncology and thoracic surgery team up to diagnose and treat cancers of the respiratory system. "Team members see the diseases from different perspectives; that benefits the patient in the long run. NCI-designated cancer centers provide the latest therapies, but UNC goes the next step, assembling a large group of individuals focused on thoracic cancer."

Wilson, a Morganton native, took a semester off and underwent radiation and chemotherapy as well as 25 treatments to the brain to eradicate a possible brain metastasis. A year later, Wilson had a recurrence and underwent another course of therapy—first chemo and then radiation. In October 2002, she and her doctors learned the cancer had spread to the brain, so she underwent radiosurgery.

Wilson says that her cancer experience has amplified her goals for a career in nursing. "I want to demonstrate compassion and the ability to understand the patient and family perspective. I think my personal experience with cancer will help me to relate to what the patient and family are experiencing."

Her philosophy is simple: "No matter how bad things get, there's always something good. You can't control what happens to you, but you can control how you handle it."

## Caring for the Whole Family

Coping with a diagnosis of cancer is never easy, but when you're 8 years old it's an especially daunting task.

After a blur of tests at home in Fayetteville and at UNC Hospitals, Fort Bragg's Will Ellis was diagnosed with Ewing's Sarcoma last year. His parents, Rick and Kim, faced the daunting task of explaining to their son exactly what it meant to have cancer.

The family settled into a routine of visiting UNC every three weeks for chemotherapy, and by March 2003, his chemotherapy treatment was complete. Will returned to McNair Elementary School on the Ft. Bragg base where his father is an officer with the 82nd Airborne. And back to hobbies such as video games, riding his bike and the Young Astronauts Club where Will is building a rocket.

"We treat whole families, not just the children," says Dr. Julie Blatt, chief of the pediatric hematology/oncology division, "because the entire family is involved."

Throughout it all, his mom says Will's spirits were high, at times even helping his parents to stay strong.

The Ellis family offers high praise for their UNC



Will Ellis.

care. "We love our team of doctors and nurses, and tell everyone we know to come to UNC."

## From the Lab to the Patient

On September 12, 2001, most people were still in shock about the terrorist attacks on the United States. Robin Hutchison had a shock of her own that day: a diagnosis of breast cancer.

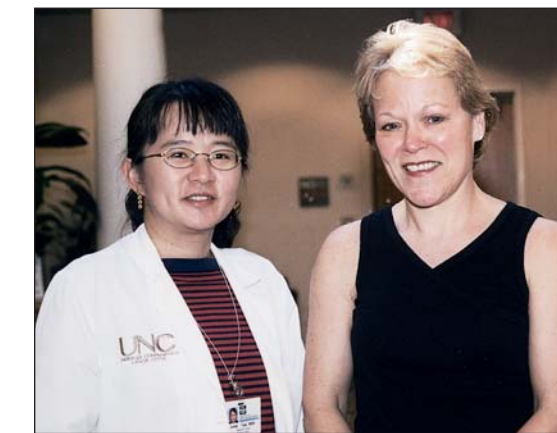
She was one of the approximately 6,000 new cases diagnosed each year in the state. About 1,100 citizens will die from the disease annually.

Hutchison began learning all she could about possible treatments. She found a lot of positive information on Herceptin and decided to enroll in a clinical trial that used the drug as chemotherapy before surgery followed by radiation.

The drug Herceptin was developed as an antibody to a protein expressed on the surface of many breast cancers. It was the laboratory research on this receptor that led—or translated—to the development of this now-standard drug.

UNC School of Medicine Dean Jeffrey Houpt stresses the importance of translational research.

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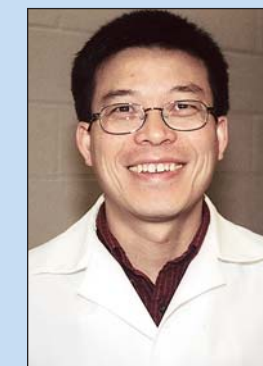


Robin Hutchison and Annie Tsui, clinical trial nurse.

## 2003 Gertrude B. Elion Award

Yi Zhang, Ph.D., assistant professor of biochemistry and biophysics and a member of the UNC Lineberger Comprehensive Cancer Center, has been awarded the 2003 Gertrude B. Elion award from the American Association of Cancer Research (AACR).

This award is given to only one tenure-track assistant professor in the country. This \$50,000 award is given to the most meritorious laboratory, clinical, and translational young research scientist.



The AACR-Gertrude B. Elion Cancer Research Award was established in 1993 in honor of the late Nobel Laureate Dr. Gertrude B. Elion, scientist emerita at Glaxo Wellcome Co. and past president and honorary member of AACR. She was also a member emerita of the Lineberger Center and longtime Chapel Hill resident.

"Yi Zhang's accomplishments during his first three years as a UNC faculty member have been extraordinary," said Dr. Shelton Earp, Lineberger Center director. "His multiple publications in the world's best journals are providing a whole new level of understanding regarding the control of gene expression and why it goes awry in cancer."

Dr. Zhang's research grant is for his work "Role of the EZH2 Histone Methyltransferase Complex in Cancer." The AACR is a scientific society of over 19,000 laboratory and clinical cancer researchers.